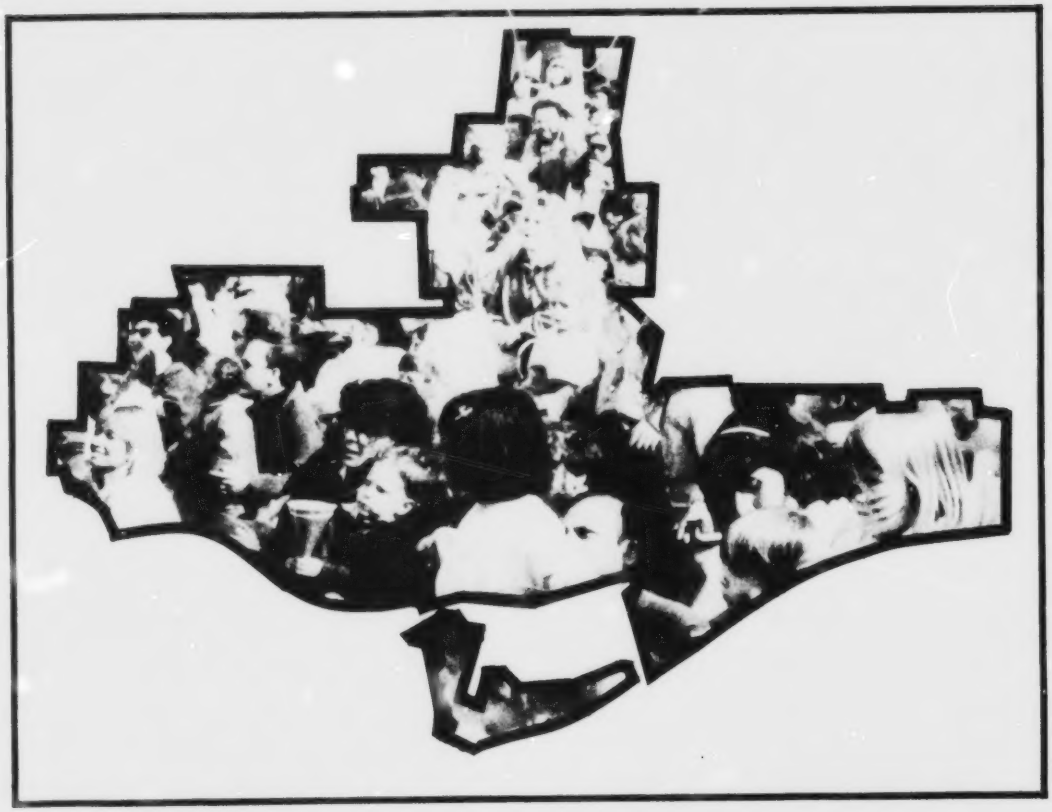
HEALTH STATUS REPORT

1988



CITY OF TORONTO, DEPARTMENT OF PUBLIC HEALTH

City of Toronto
Department of Public Health
Community Health Information Section

HEALTH STATUS REPORT 1988

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Medical Officer of Health

December 1989

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Chapter One
Introduction

1.0 INTRODUCTION

Data-based planning has developed into a strong discipline in public health and, like any discipline, it has its specialists. However, public health data-based planning is also characterized by the involvement of members of the Board of Health as well as Department managers, supervisors and staff from all public health disciplines. This report, summarizing the available data on the health of City of Toronto residents, is primarily intended for use by these groups.

The City of Toronto Department of Public Health has reported on the health status of Toronto residents for several decades. Until 1983, these data were reported on an annual basis as part of the Department's annual statement to the Board of Health. As the scope of available health status data began to expand, the Department moved to a five-year cycle for a major health status report. The first report in this series, Health Status Report 1983, included 100 pages of demographic, morbidity, mortality and reproductive health data.

This document, which reports on the health status of Toronto residents in 1988, expands the scope of health-related data even further. It includes major chapters on health promotion, health behaviours and healthy environments in addition to the subjects covered in 1983.

The five-year cycle of reports is timed to coincide with the availability of detailed data from the five-year census and the Toronto Community Health Survey (TCHS). In this report, we have drawn on data from the 1986 census, the 1988 Toronto Community Health Survey and the Department's routine surveillance systems. We have also included some data from external sources in order to make this information more accessible and to highlight its relevance to health. The sources and limitations of all these data are described in Appendix A.

We present data on age and sex differences for most indicators. Readers must keep in mind the fact that aggregate data such as these may mask other differences in the health status of Toronto residents. We will address these differences in a forthcoming report on health inequalities and in a more comprehensive report on the 1988 TCHS. Both reports are underway and should be available in mid-1990.

Meanwhile, we hope that readers will interpret the preliminary TCHS results, in particular, with some care. While the survey provides us with the only available data on the important subjects of health promotion, health behaviour and healthy environments, it does not adequately represent Toronto residents with low incomes, little formal education and non-English mother tongues. All TCHS references are to the 1988 survey unless the

1983 TCHS is specifically cited.

The material in this report is organized into chapters in conventional fashion. Each chapter begins with a brief introduction and summary. Indicators or topics are then presented as a series of independent units, accompanied in most cases with charts. Tabular data have been placed in Appendix B and tables are numbered to correspond with section and figure numbers in the body of the paper. We hope this format will enable readers to make better use of the report as a reference document.

We have not included tabular data for TCHS data because they will be presented in detail in the forthcoming TCHS report.

The concluding chapter suggests some of the implications of the data in this report for programs in the City of Toronto Department of Public Health. With the possible exception of this chapter, we expect the report will also be of interest to other Civic departments, to students and to members of the diverse communities that make up the City of Toronto.

Chapter Two
Demographic Profile

2.1 INTRODUCTION AND SUMMARY

The City of Toronto is part of Metropolitan Toronto which, together with the four surrounding regional municipalities of Halton, Peel, York and Durham, form the Toronto Region.

More recently, this large urban agglomeration has been called the Greater Toronto Area. Even though the population of this region has increased to nearly 3.8 million and its suburbs have come to resemble more and more the central city, the City of Toronto continues to play a special role as the core municipality. This unique role is reflected in the City's demographic characteristics.

The desirability of new housing in the central area has led to recent increases in the City of Toronto's population for the first time in many years. The age and sex structure of the population continues to show the effects of population aging. Its 'torch' shape also reflects the effect of highly mobile young adults: 76 percent of 25-34 year olds reported in the 1986 census that they had moved within the previous five years. A total of 20 percent of the City's population were relative newcomers in 1986.

One-third of the newcomers came from outside Canada. The City of Toronto continues to attract a large number of new immigrants and its multicultural character will likely be one of its strengths for many years to come.

The City of Toronto has more non-family households, more single-person households and more lone parent families than elsewhere in Metro or the Region. In 1986, lone parent families accounted for 27 percent of all families in the City with children. One in five children lived with a single parent.

To a lesser extent the City's demographic character also reflects the influence of natural increase, that is, natality and mortality. More women over the age of 30 are having babies with the result that the total fertility rate is slowly increasing again. And life expectancy continues to increase for both men and women, although the gap between men and women persists.

The data for this chapter are drawn from Vital Statistics kept by the Community Health Information Section and from the Census. In addition to computerized census files maintained by the Department of Planning and Development, we have also made use of that Department's Research Bulletin 29: Census 1986, Key Demographic Indicators. These sources of data are described more fully in Appendix A.

2.2 POPULATION CHANGE

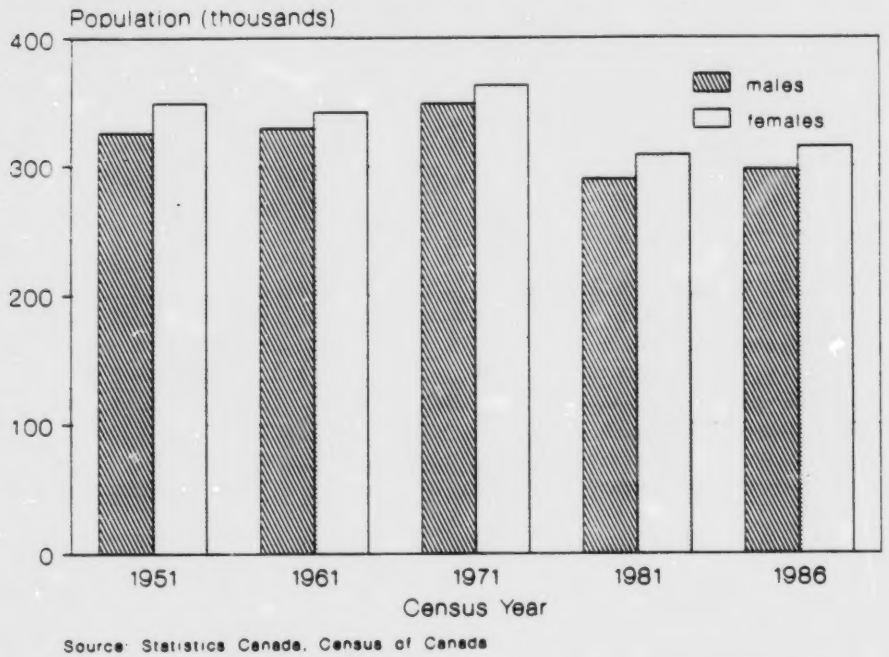


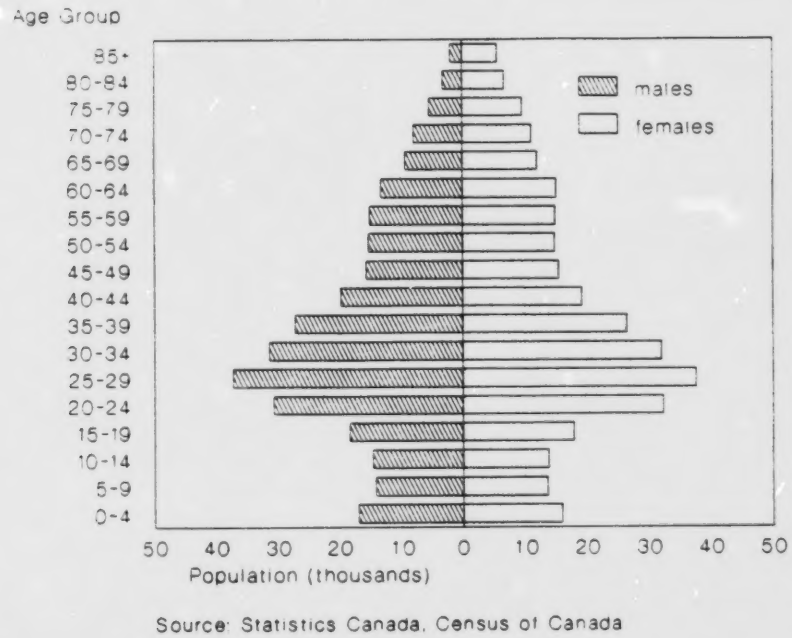
Figure 2.2 Population Change, City of Toronto 1951-1986

The size and structure of the City of Toronto's population has changed significantly over its history. By 1951, the City's population had grown to 699,200. It continued to grow until 1971 when it peaked at 712,800. In the decade between 1971 and 1981, the City's population declined to 600,200.

The 1986 census revealed that for the first time in more than a decade, the population of the City Toronto had began to grow. This population growth, to 612,300 in 1986, is primarily the result of new housing construction in the Central Area of the City. Since 1976, the Central Area's population has grown by 17.2 per cent (19,500). The population of outer city neighbourhoods fell by 8 percent (41,500) during the same period.

A mini-census that is currently being conducted for the Department of Planning and Development is expected to reveal further increases in population in the Central Area. For this report we have estimated a 1988 population of 617,800. Table 2.2 in Appendix B provides further details.

2.3 POPULATION STRUCTURE



Source: Statistics Canada, Census of Canada

Figure 2.3 Population Structure, City of Toronto 1986

The dominance of the baby boom cohort (persons aged 20-39 years old in 1986) is readily apparent in Figure 2.3. In 1986, this age group accounted for 42 percent of the City's population; it changes the shape of the population structure from the familiar pyramid to a 'torch' with younger age groups as the handle, the baby boom cohort as the base, and middle age and older age groups as the flame.

The effect of the aging of the population is becoming increasingly prominent in the City's population structure. The proportion of children and adolescents continues to decline, although in absolute numbers they still constitute a large group.

Figure 2.3 also shows the relative number of males to females in five-year age groups. Overall, there were 1.06 females for every male: this imbalance was particularly evident among the elderly. Among younger age groups, on the other hand, males slightly outnumbered females.

Table 2.3 in Appendix B provides more details.

2.4 FERTILITY

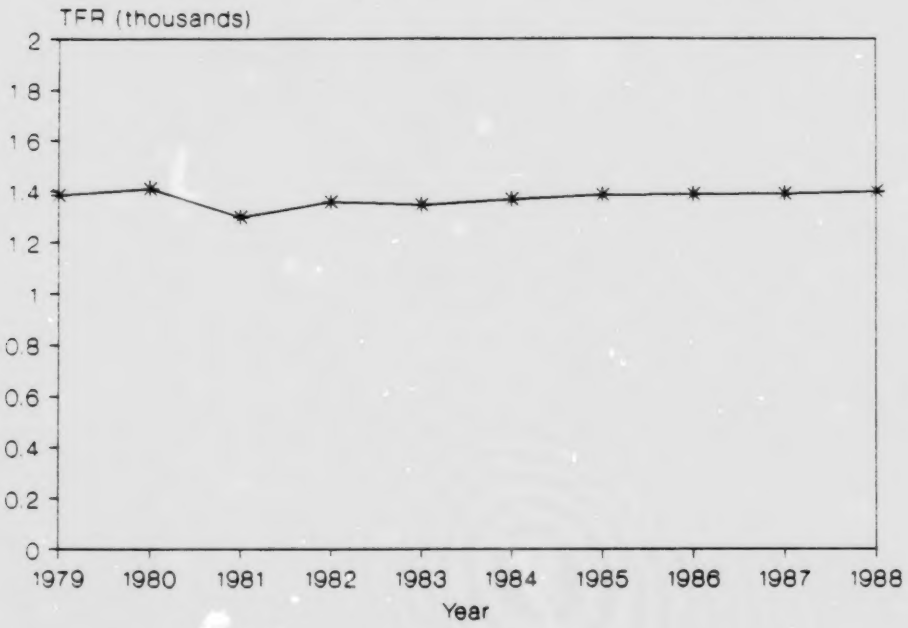


Figure 2.4a Total Fertility Rates, City of Toronto 1979-1988

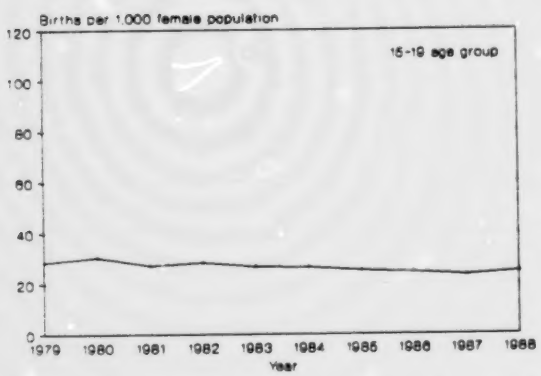
The total fertility rate for the City of Toronto in 1988 was 1,399. The TFR is the average number of children that 1,000 women aged 15-49 would have if they experienced the 1988 age-specific birth rates shown on Figure 2.4b that follows. Figure 2.4a shows that the TFR has been slowly but steadily increasing since the historic low point of 1,300 was reached in 1981.

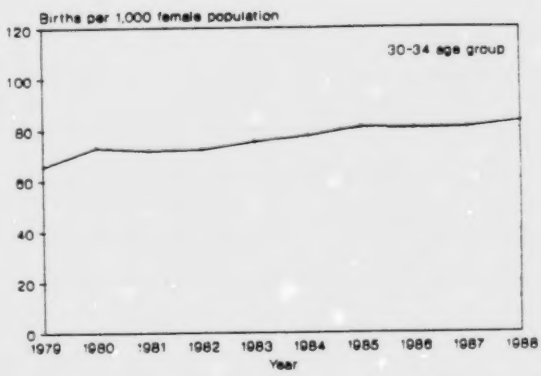
The age-specific fertility rates indicate that in 1988, females in the age group 30-34 had the highest fertility rate at 82.8 (that is, 82.8 birth for every 1000 women in the age group). They were followed by the age group 25-29, with a rate of 72.2; the youngest age group, 15-19 year olds had the second lowest rate at 24.7, and the oldest group, 40-45 year olds had the lowest rate at 8.6.

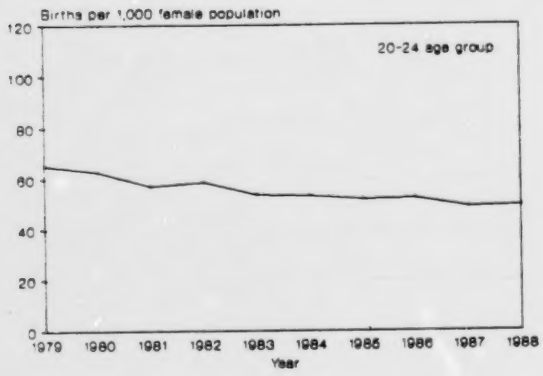
Over the past decade, the age-specific fertility rates for women aged 29 and under have steadily decreased, while the rates for women 30 years of age and over have steadily increased.

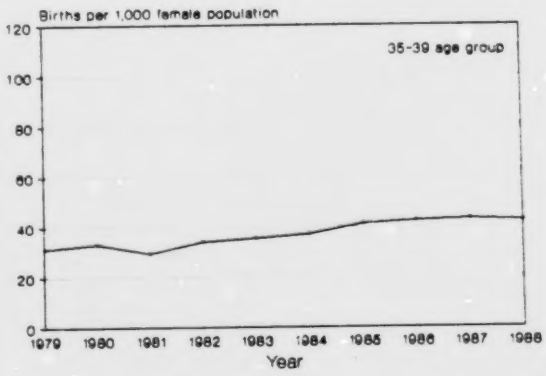
Table 2.4 in Appendix B provides more detail.

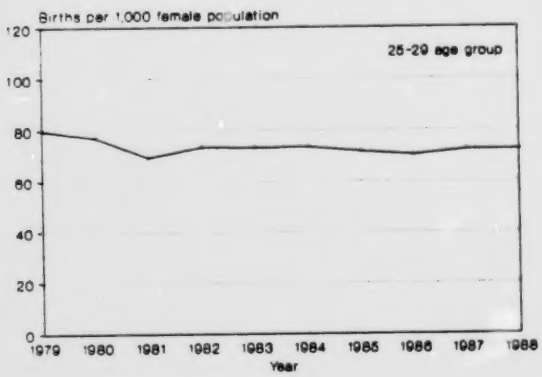
Figure 2.4b Age-Specific Fertility Rates, City of Toronto, 1979-88

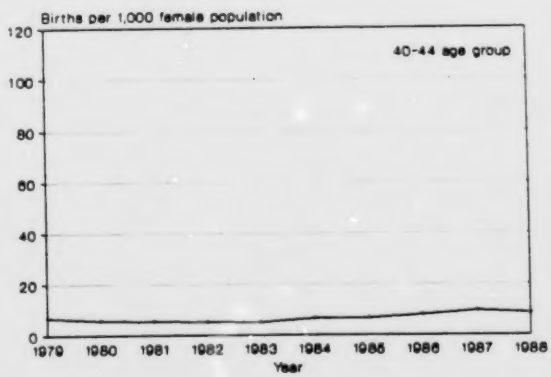




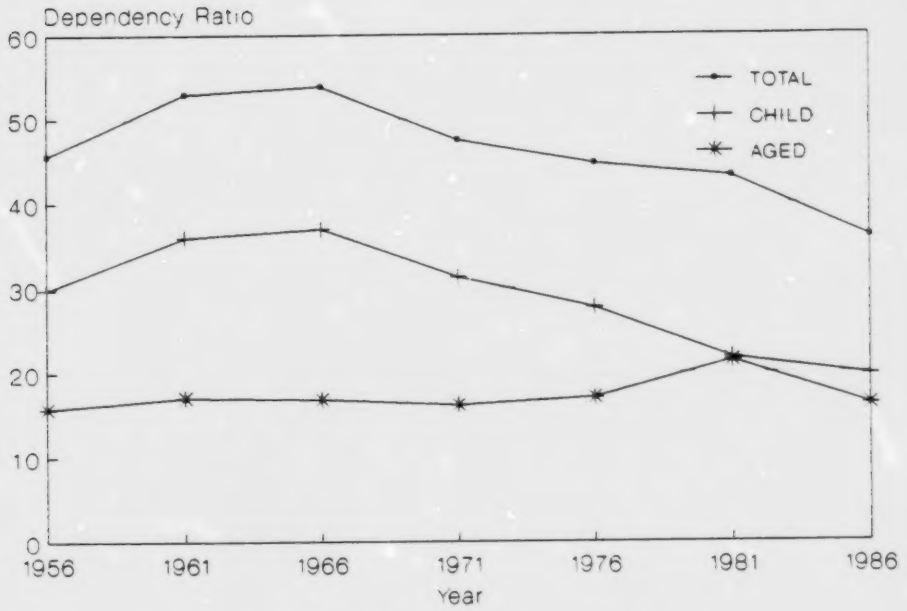








2.5 DEPENDENCY RATIO



Source: Statistics Canada, Census of Canada

Figure 2.5 Dependency Ratios, City of Toronto 1956-1986

The Dependency Ratio is a demographic indicator that has traditionally been used to reflect the overall productivity and social burden of a society. The smaller the dependency ratio, the more productivity and less social burden a society will experience. The indicator is based on the assumption that children under the age of 15 and adults aged 65 and older are dependent on a labour force aged 15 to 64.

Figure 2.5 shows that the City of Toronto has experienced a downward trend in its dependency ratio in the past two decades. This was largely due to significant decreases in the number of children in the City. It probably reflects the movement of young families out of the city and of young singles into the City, more than the natural factors of birth and death.

Table 2.5 in Appendix B provides more details.

2.6 LIFE EXPECTANCY

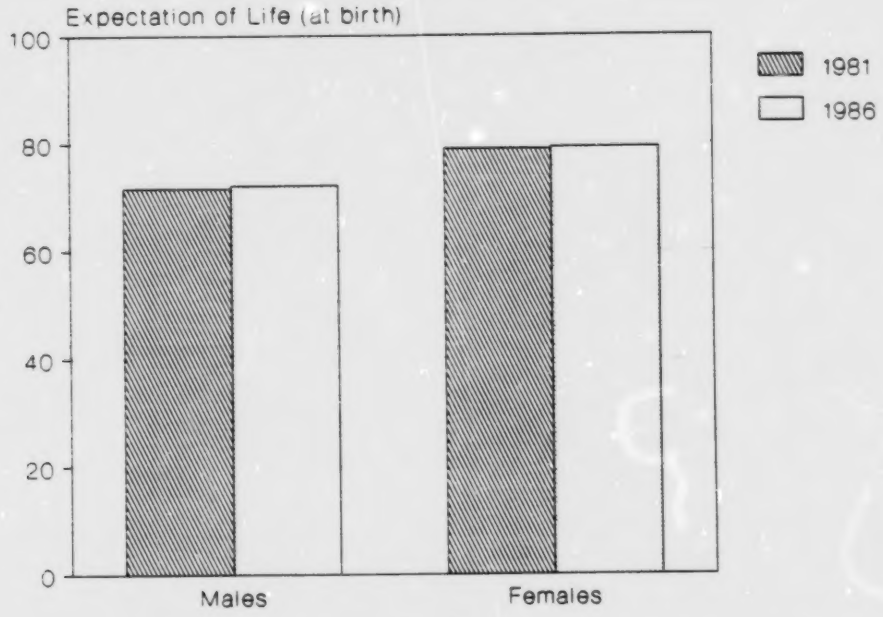


Figure 2.6 Life Expectancy, City of Toronto 1981 & 1986

Life expectancy at birth is one of twelve indicators used by the World Health Organization for monitoring health status; it is an effective summary of mortality patterns in a community.

Figure 2.6 shows that the life expectancy at birth for male residents of the City of Toronto in 1986 was 72.3 years, compared with a life expectancy for females of 79.3. Women continue to enjoy a longer life than men, with the result that elderly women are more likely to live alone during their old age.

There has been some improvement in life expectancy at birth since 1981 for both men and women, when the comparable figures were 71.7 for men and 79.0 for women. But the narrowing of the gap between the sexes is barely perceptible.

Table 2.6 in Appendix B provides more details and cites the method used to calculate life expectancy.

2.7 HOUSEHOLD AND FAMILY STRUCTURE

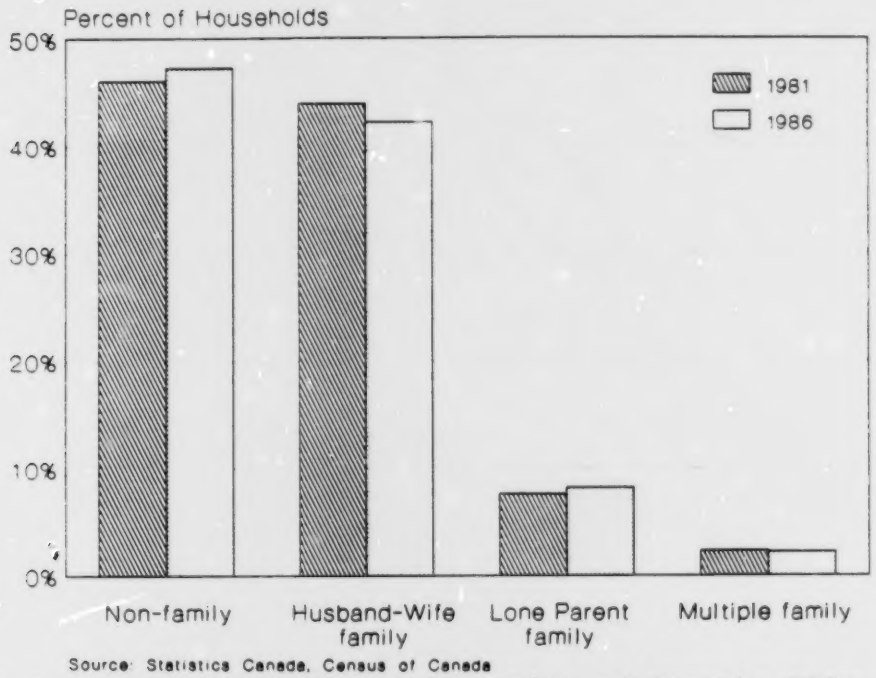


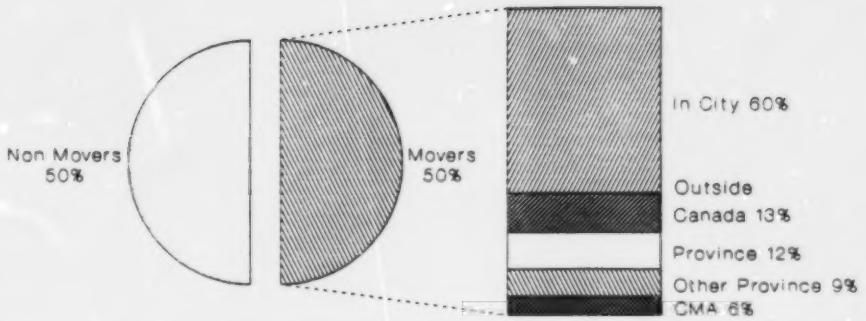
Figure 2.7 Household Composition, City of Toronto 1981 & 1986

In 1986 the City of Toronto had a total of 253,140 households of which 53 percent were classified for census purposes as family households and 47 percent as non-family households. The census definition of a family is quite traditional, but it is significant nonetheless that the percentage of non-family households in the City of Toronto is much higher than elsewhere in the Toronto Region. Nearly three quarters of the overall increase in the number of City households between 1981 and 1986 was in the non-family category.

Some 37 percent of households in the City of Toronto were single-person households; 28 percent had two persons, 13 percent had three persons, and the remaining 22 percent had four or more persons in the household. The overall average household size was 2.4 persons, the same as in 1981.

Of the 139,000 families in the City of Toronto, 83.4 percent were husband-wife (including common-law) families, and 16.6 percent were lone-parent families. The latter accounted for 27 percent of families with children in the City; one in five children under the age of 24 living in the City was in a lone-parent family. In comparison, the percentage of lone-parent families in the rest of the Region was 12.5 percent. Table 2.7 in Appendix B provides more detail and the census definition of a family.

2.8 MOBILITY



Source: Statistics Canada, 1986 Census of Canada

Figure 2.8 Mobility of City of Toronto Residents 1986

Residents of the City of Toronto are highly mobile. Figure 2.8 indicates that 50 percent of them reported in the 1986 census that they had moved at least once since 1981.

Forty percent of this group had moved into the City of Toronto from elsewhere. These migrants numbered 114,000 and accounted for 20 percent of the total population of the City of Toronto in 1986. In other words, 20 percent of the city's population in 1986 had moved into the City within the previous five years.

These newcomers reported a variety of places of origin:

* 33 percent came from outside Canada;
* 22 percent came from other provinces within Canada;
* 29 percent came from Ontario but outside the Toronto CMA;
* 16 percent came from within the Toronto Census Metropolitan Area (which roughly corresponds to the Toronto Region), but from outside the City of Toronto.

By comparison, there were 108,000 newcomers between 1975 and 1981, with 37 percent coming from outside Canada and 19 percent from other provinces. Some of the newcomers may have come and gone during the same period, however. Our profile of mobility is one-sided because we do not have information about moves out of the City.

As Figure 2.8 shows, 60 percent of residents who moved within the five-year period 1981-86 moved within the City of Toronto.

The City's age structure is clearly related to mobility: 76 percent of 25-34 year olds reported moving at least once between 1981 and 1986.

2.9 ETHNICITY

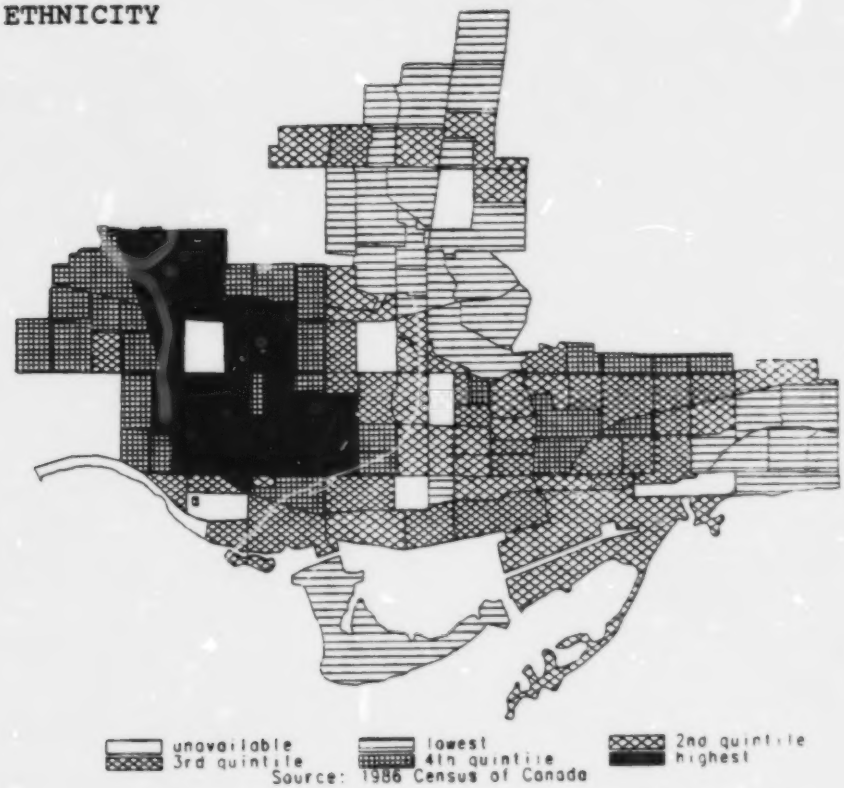


Figure 2.9 Quintiles of Census Tracts by Non-English Mother Tongue, City of Toronto, 1986

More than one-third of the City of Toronto's population reported in the 1986 census that their mother tongue was a language other than English. Mother tongue refers to the language first learned in childhood and still understood. Portuguese (7.4 percent), Chinese (5.8 percent), Italian (4.3 percent) and Greek (1.8 percent) continue to be the languages, other than English, cited most frequenty as mother tongue by City of Toronto residents.

Figure 2.9 shows the spatial distribution of residents by mother tongue in the City. The highest quintile (shaded darkest) refers to census tracts with the highest proportion of residents reporting a mother tongue other than English or French (that is, the top 20 percent of census tracts). The second quintile refers to the next highest 20 percent of census tracts, and so on. The pattern of concentration varies for each language, of course.

Mother tongue is the best indicator of ethnicity available from census data. It demonstrates clearly the multicultural nature of the City of Toronto. Figure 6.3 on the birthplace of City of Toronto mothers also provides some insight into the ethnic background of City residents.

Chapter Three
Health Promotion

3.1 INTRODUCTION AND SUMMARY

Health promotion is the process of enabling people to increase control over and improve their health. The development of indicators for this new concept of health promotion is one of the most interesting challenges in the field of health information.

The Ottawa Charter for action to achieve health for all by the year 2000 suggests five health promotion strategies: build healthy public policy; create supportive environments; strengthen communities; develop personal skills; and reorient health services, with special emphasis on community development and empowerment. The 1988 Toronto Community Health Survey (TCHS) was used to collect data on as many of these aspects of health promotion as possible.

Perceived health status provides a very general indication of how a person feels about their health. The results to this question in the TCHS suggest that the indicator may refer in part to a person's sense of control over their health as well as their medically-diagnosed condition.

The TCHS included several questions on supportive environments. Data on the physical environment are presented in Chapter 5. In this chapter we discuss the social environment. TCHS respondents varied in the extent of social support they receive from family, friends and neighbours; but in general, most reported highly supportive social environments. Nine percent of respondents with primary or pre-school-age children said they needed child care, however. And 11 percent of employed respondents were dissatisfied with their work; as expected, work satisfaction was related to occupation and income.

Involvement in groups can help strengthen personal skills and also strengthens community action. Thirty percent of TCHS respondents said they were not involved in any sort of group. Among those who were involved, the extent and type of involvement varied considerably with age.

Data from Statistics Canada's Health and Activity Limitation Survey (HALS) indicate that a large proportion of persons with severe disabilities rely on family, friends and neighbours for many everyday life activities. While this confirms the importance of social support, it also suggests the need to reorient health and social services so that persons with disabilities can enjoy as full a life as possible.

3.2 PERCEIVED HEALTH STATUS

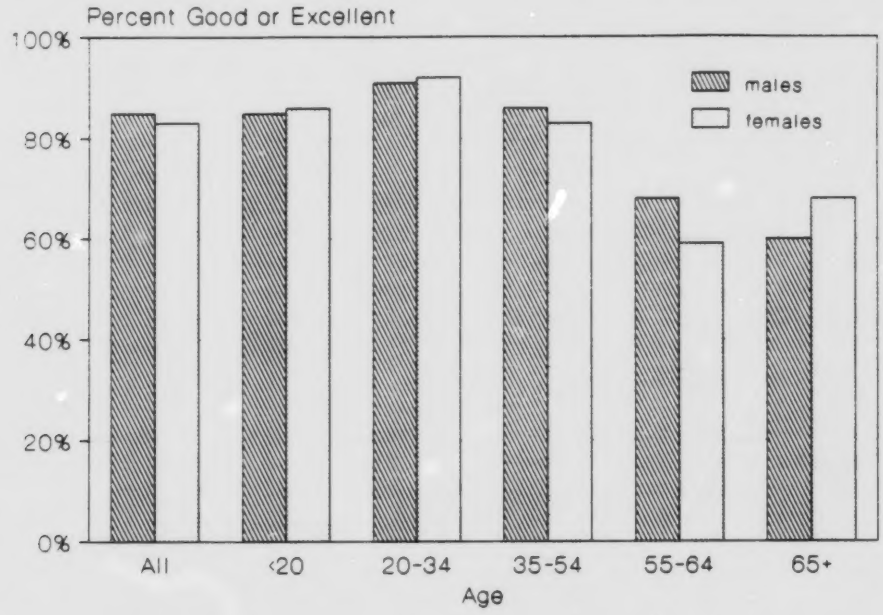


Figure 3.2a Perceived Health Status by Age, TCHS 1988

The first question asked of respondents to the 1988 Toronto Community Health Survey (TCHS) was how they perceived their health status compared with other persons their age: was it excellent, good, fair or poor.

In 1983, this initial self-assessment was used as a subjective indicator of the overall health status of the City's population. Recent theoretical work on the concept of health promotion now suggests a more subtle interpretation of the results to this question. Self-assessed health status may refer as much to a person's sense of control over their health as it does to their medically-diagnosed health status. In that sense, it may call into question the validity and utility of more objective measures.

Figure 3.2a indicates that most TCHS respondents felt quite positive about their health. Some 85 percent of male and 83 percent of female respondents rated their health status as excellent or good compared with other persons their age. Only four percent of respondents, male and female, rated their health as poor. The 1983 TCHS findings were similar.

The age differences shown in Figure 3.2a are predictable: 91 percent of respondents age 34 or less perceived their health as excellent or good; this percentage drops to 64 percent for

respondents age 55 or older. As a person ages, he or she is more likely to suffer from health problems and, a related point, their ability to control and improve their health as well as their sense of control may decrease.

Figure 3.2b shows clearly that the relationship between perceived health status and medically-diagnosed health problems is complex. Two-thirds of respondents who reported they had been diagnosed with cancer said their health was excellent or good. In comparison, just 55 percent of respondents who reported they suffered from arthritis or rheumatism felt positively about their health status. Respondents who reported they suffered from a heart condition, emphysema or chronic bronchitis, or serious trouble with their back or spine were more likely to characterize their health as either good or fair.

These data will be discussed in more detail in a forthcoming report on the TCHS. However, there is clear indication here that we are dealing with more than a single dimension of health status: we must pay more attention to how and why people feel the way they do about their health and we must find better ways of measuring this dimension.

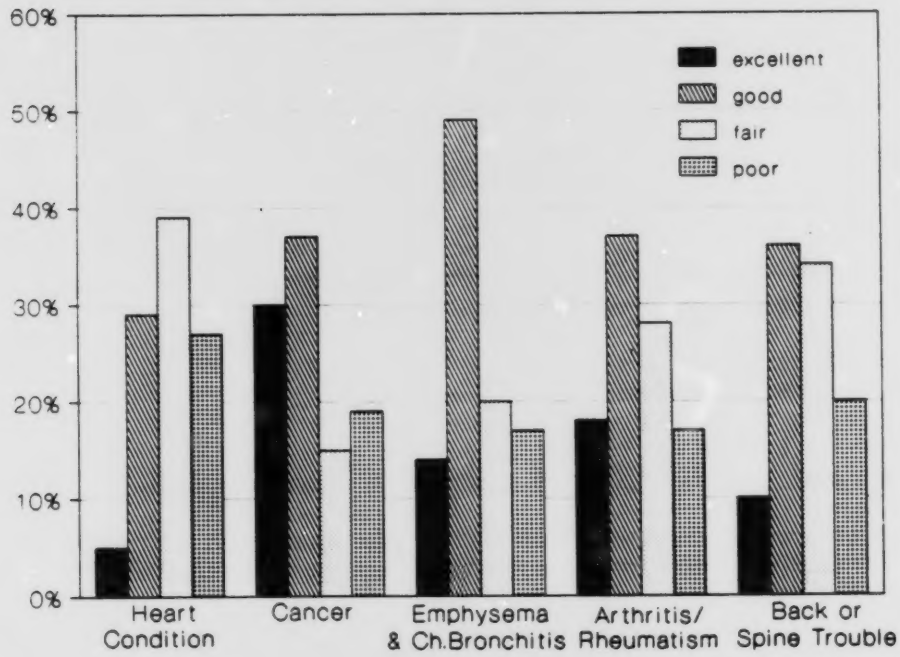


Figure 3.2b Perceived Health Status by Current Illness, TCHS 1988

3.3 SOCIAL SUPPORT

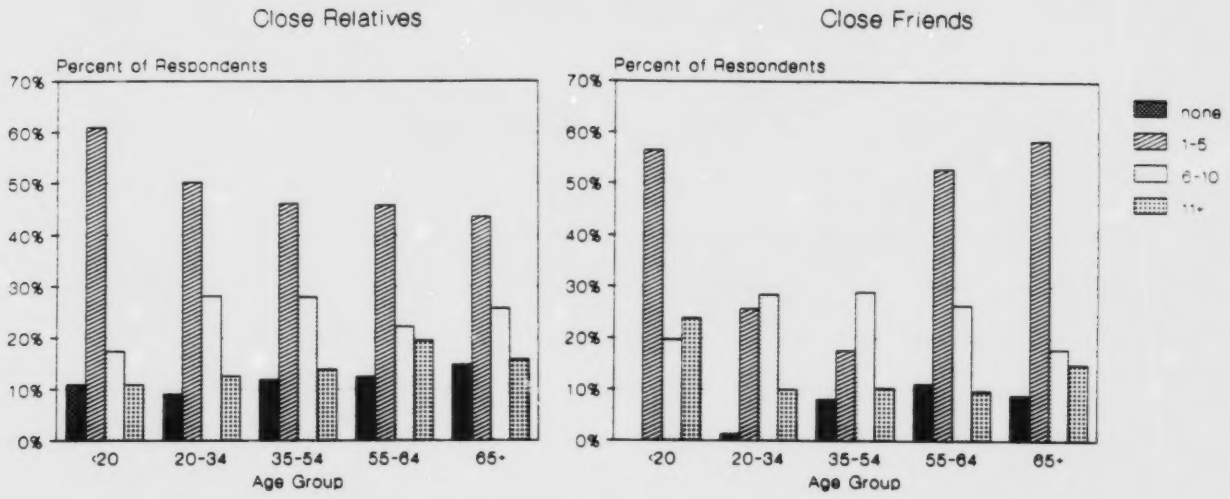


Figure 3.3a Number of Close Relatives and Friends, TCHS 1988

One important indication of the social support a person can rely upon is whether they have close relatives or friends. TCHS respondents were asked how many relatives or friends they felt close to, not counting people with whom they lived. Figure 3.3a shows the results by agegroup.

None of the TCHS respondents reported that they lacked both close relatives and friends with whom they felt at ease, could talk to about private matters and who they could call upon for help. Eleven percent of the sample said they had no close relative and six percent said they had no close friend, but every respondent had either one or the other.

The median number of close relatives was four: that is, the same number of TCHS respondents had either more than four close relatives as had fewer than four. The median response was four for females and five for males. Fifteen percent of respondents over the age of 64 reported that they had no close relatives.

The median response for close friends was five for both males and females. Ten percent of respondents over the age of 55 said they had no close friends.

To further explore the concept of social support, the TCHS sample were asked to respond to a series of five questions about the nature of their relationships. The questions probed the extent to which respondents felt there was someone they could turn to for

advice, to share their worries and fears, to help with the chores if they were sick, to call if they felt lonely, and so on. The pattern of responses to the questions is coded in such a way that each respondent can be assigned a score on the ISEL scale (Interpersonal Support Evaluation List), a standard psychological tool for measuring social support.

Figure 3.3b below shows the relationship between respondents' ISEL scores and their age. Scores on the scale can range from 5, indicating an absence of social support, to 20, indicating very high levels of support. A significant number of TCHS respondents scored at the high end of the scale.

Just five percent of the scores were below 13. The median score was 19 while the modal score was a 'perfect' 20; in other words, half of the scores were at the extreme positive end of the scale. There were no significant sex differences and Figure 3.3b shows few differences by age. More than 60 percent of respondents in all age groups scored above 16.

Positive responses to the specific ISEL items ranged from 82 percent to 93 percent for the overall sample. Respondents aged 65 and older scored at least as positively as younger age groups on four of the five items. The one exception concerned their confidence in having someone they could rely on to help with the chores if they were sick.

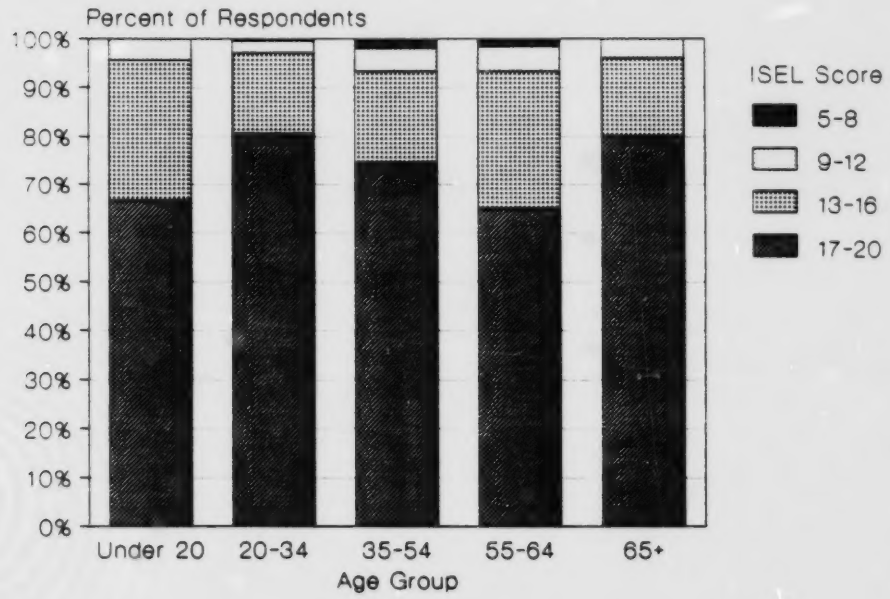


Figure 3.3b Social Support by Age, TCHS 1988

3.4 GROUP INVOLVEMENT

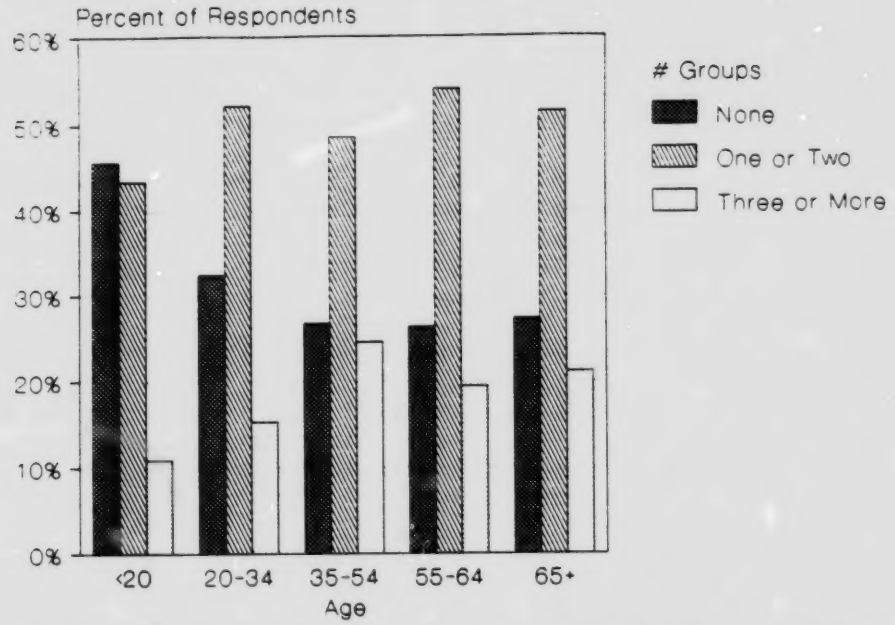


Figure 3.4a Extent of Group Involvement by Age, TCHS 1988

Group involvement is an important element of the health promotion strategies outlined in the introduction to this chapter. Through their involvement in groups, individuals strengthen their personal skills and their communities: they feel more in control of their lives and indeed, they may actually gain more control.

Respondents to the TCHS were asked about the extent of their involvement in a number of different types of groups, ranging from social and recreational groups to groups concerned with political issues such as the environment, peace and human rights. Thirty percent of respondents said they did not belong to any of these groups.

Seventy percent of TCHS respondents reported they belonged to one or more groups; 40 percent belonged to two or more groups and 18 percent belonged to three or more. Figure 3.4a shows the extent of group involvement by age. There was no relationship between extent of group involvement and sex.

Figure 3.4b (opposite) shows the extent of involvement in different types of groups. The types of affiliation most commonly cited were social and recreational (31 percent); labour, professional and commercial (32 percent); and church or religious groups (31 percent). Affiliation with groups concerned with community service, charity or neighbourhood improvement were cited by 19 percent of the sample. Ten percent of respondents belonged to groups concerned with children. Twelve percent said

they belonged to groups concerned with the environment, human rights or peace. The latter are categorized as political groups in Figure 3.4b, although any group could be considered political to the extent its individual members become more powerful through their membership.

Men in the TCHS sample were somewhat more likely than women to affiliate with labour, professional and commercial groups (36 versus 30 percent). Beyond that, there was little difference in group membership by sex.

As might be expected, respondents aged 65 and older were more likely than other age groups to be members of social and recreational groups, church and religious groups and community service groups; they were less likely to be members of employment-related groups such as unions and professional organizations. Some 54 percent of seniors in the TCHS sample belonged to church or religious groups.

Affiliation in employment-related groups was cited by 42 percent of 35 to 54 year olds. Sixteen percent of that age group said they belonged to a group concerned with children, such as Home and School or Scouts.

Membership in community and neighbourhood service groups and in explicitly political groups was also age-related, with step-wise increases in each age group for the former and similar but smaller increases for the latter. The exception was respondents aged 65 and older who were least likely to belong to environmental, human rights or peace groups.

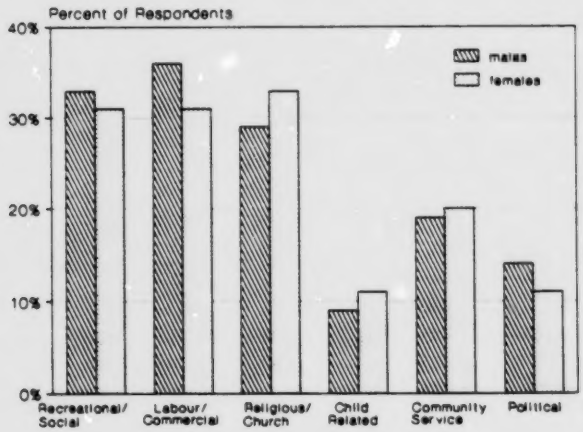
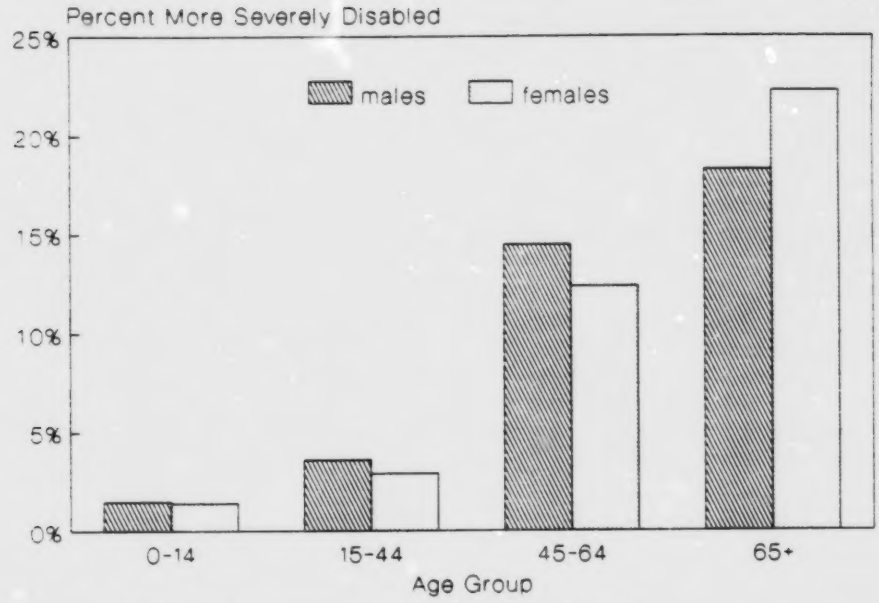


Figure 3.4b Type of Group Involvement by Sex, TCHS 1988

3.5 DISABILITY



Source: Health and Activity Limitation Survey, Statistics Canada

Figure 3.5a Severe Disability by Age, Cities of Toronto and York and Borough of East York, 1986

In the context of health promotion, our concern is whether persons with disabilities have the physical, social and economic opportunities that would enable them to live as full as life as possible. This issue was addressed by the Health and Activity Limitation Survey (HALS) conducted in 1986-7 by Statistics Canada.

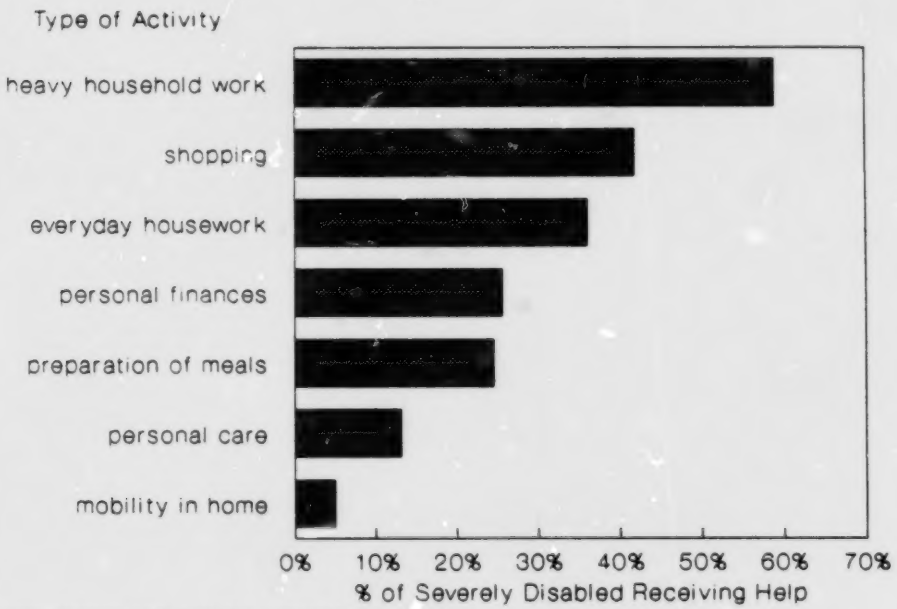
HALS data is available for the Cities of Toronto and York and the Borough of East York combined. The survey identified 61,205 persons in this area with severe disabilities; that is 7.2 percent of the total population. The comparable figures for Metro and Ontario were 6.9 percent and 7.6 percent, respectively. Since HALS only identified residents in these municipalities with more severe disabilities, it is a conservative estimate. These are the persons with whom we are most concerned from a health promotion standpoint, however.

Figure 3.5a shows the distribution of this group into different age groups: 2.8 percent of those under the age of 45 had severe disabilities compared with 13.4 percent of those aged 45 to 64 and 20.8 percent of those 65 years of age and older.

Just 41 percent of 15-64 year old persons with severe disabilities were employed; among this group, 82 percent said they were limited in the kind or amount of work they could do.

Figure 3.5b shows the extent of their dependence on others. According to a recent analysis of HALS data by the Department of Planning and Development, almost 60 percent of persons with severe disabilities in the combined area received assistance with heavy household chores, 42 percent with shopping, 36 percent with normal everyday housework, 26 percent with personal finances, 25 percent with meal preparation, 13 percent with personal care and five percent with moving about their home. At least three quarters got this help from family, friends or neighbours.

Preliminary TCHS data on activity limitation suggests that 10.6 percent of respondents were limited in the kind or amount of activity they could do by a long term physical condition or health problem; these data include persons with mild and moderate levels of disability, as well as those with severe disabilities.



Source: Health and Activity Limitation Survey, Statistics Canada

Figure 3.5b Dependence on others for Daily Activities, Cities of Toronto and York and Borough of East York, 1986-7

3.6 WORK SATISFACTION

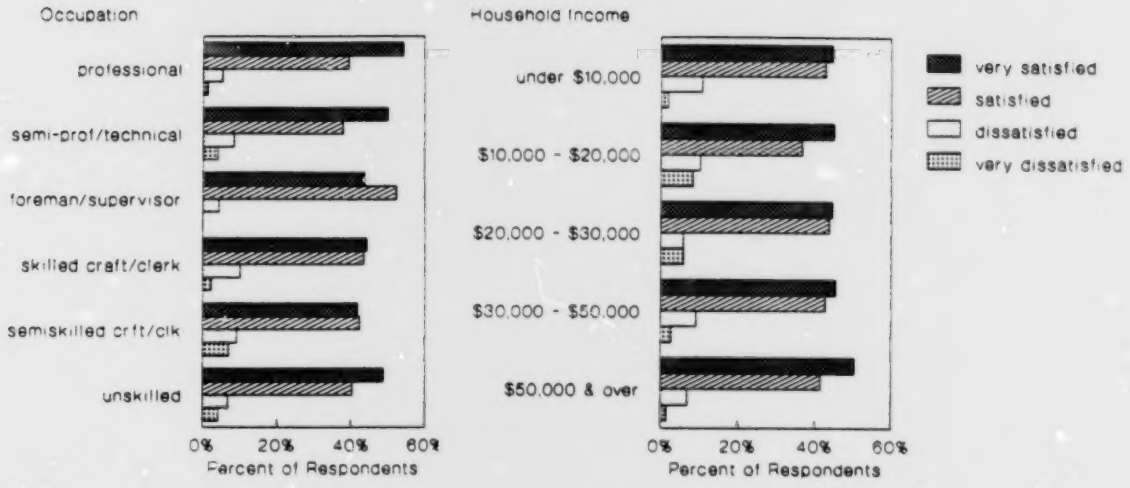


Figure 3.6 Work Satisfaction by Occupation and Income, TCHS 1988

To the extent that a person's satisfaction with their work contributes to their sense of achievement, self confidence, and empowerment, it is an important dimension of health promotion.

A large majority of TCHS respondents who were working at the time of the survey or had worked during the past five years expressed satisfaction with their work. Some 91 percent of male respondents and 86 percent of females said they were either very satisfied or satisfied. Eleven percent of the TCHS sample expressed dissatisfaction with their work.

Younger respondents were somewhat less likely to be satisfied with their work: 15 percent of those younger than 35 were dissatisfied compared with just six percent of those over 35.

Figure 3.6 shows that respondents in professional or supervisory occupations were most likely to be satisfied with their work (94 percent), while those in semi-skilled craft or clerical occupations were least likely to be satisfied (84 percent). Similarly, respondents with household incomes in excess of $50,000 were most likely to be satisfied (92 percent), followed by those with incomes between $20-50,000 (88 percent) and those with less than $20,000 (84 percent).

3.7 CHILD CARE

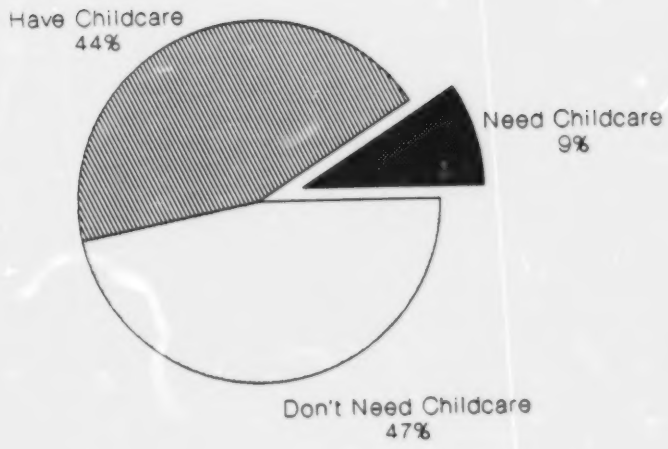


Figure 3.7 Expressed Need for Child Care in Households with Primary or Pre-school Children, TCHS 1988

Day care is an essential form of support for many families. Eighteen percent of TCHS respondents indicated there were primary or pre-school children in their household. Figure 3.7 shows that 47 percent of these households did not need child care, 44 percent had child care, and nine percent needed some form of child care.

Among the 44 percent who already had child care, 39 percent used licensed daycare and 61 percent made other child care arrangements. Most TCHS respondents with child care (94 percent) were satisfied with their current arrangement.

Among the nine percent of respondents who said they needed child care, those with pre-school children had the greatest need. Eighteen percent of respondents with pre-school age children expressed a need for child care.

Chapter Four
Health Behaviour

4.1 INTRODUCTION AND SUMMARY

Certain behaviours are believed to be important determinants of health. In this chapter we report on both health-damaging and health-enhancing behaviours.

Behaviours such as cigarette smoking, substance abuse (including licit and illicit drug use and excess consumption of alcohol), inadequate diet, and drinking and driving are considered health-damaging because they increase the risk of disease or accident. Behaviours such as proper diet, physical activity, breast examination, Pap tests, preventive dental practices, safe sex practices and seatbelt use, on the other hand, can enhance an individual's health.

Most of the data for this chapter are drawn from the 1988 Toronto Community Health Survey (TCHS). These data suggest the following general patterns:

* cigarette smoking has decreased somewhat since 1983;
* alcohol continues to be the substance most often abused;
* most people do not get enough exercise, either in fitness activities or in their daily life;
* condoms are apparently being used by a large number of sexually-active adolescents and adults;
* some women still do not engage in preventive health practices such as pap smears and breast self-examination;
* improper diet is a problem for many people, although there seems to be increased awareness of the need for changes;
* many older people still are not benefiting from preventive dental practices; and
* some drivers still do not wear seat-belts.

We also report data from the Daily Bread Food Bank and from the Metropolitan Toronto Police Department. These data suggest that:

* many people in Toronto require food assistance;
* drinking and driving continues to be a serious problem, especially among male drivers; and
* reports of most types of crimes have either stayed constant or increased only slightly in recent years.

We are aware of the tendency to proceed from findings such as these to the conclusion that individuals are solely responsible for their health status, the 'blame-the-victim' approach. But people can only choose from the options available to them. Healthy lifestyle changes will occur when individuals and groups have sufficient control over their lives. Therefore, efforts expended on community development and empowerment are equal in importance to those spent on health promotion.

4.2 CIGARETTE SMOKING

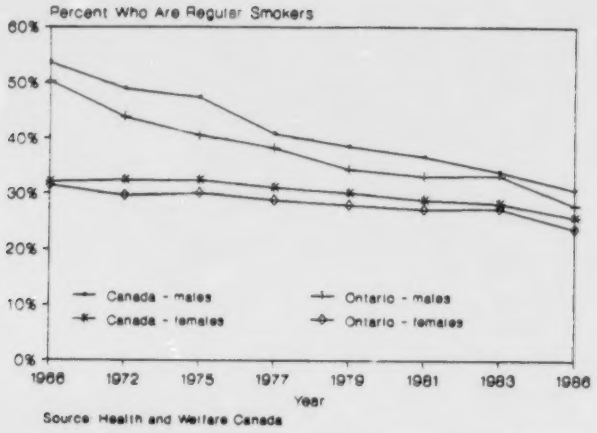


Figure 4.2.1 Trends in Smoking Behaviour, 1966-1986

4.2.1 National and Provincial Situation

Cigarette smoking is a behaviour which causes lung cancer and other respiratory diseases. At the national level, the overall prevalence of cigarette smoking has been declining during the past two decades. In 1986, the percentage of regular smokers, that is, those who reported smoking cigarettes daily, among individuals aged 15 and over was 28 percent; this compared to 33 percent in 1981, 37 percent in 1975, and 43 percent in 1966. This decline is seen among both sexes although men accounted for the largest share while women followed a slight and gradual trend.

Ontario has followed a similarly declining trend in the prevalence of regular smokers. Over the last two decades, the percentage of regular smokers among the adult population of the province dropped from 41 percent in 1966 to 35 percent in 1976, and further to 26 percent in 1986. It is encouraging to note that the prevalence of regular smokers in the province is consistently lower than the national average. In addition, the rate of decrease in the percentage of regular smokers between 1983 and 1986 is higher than the national rate.

Data for Metro Toronto are available only for the years 1981, 1983, and 1986. They consistently show proportions of regular smokers lower than both the national and provincial figures. In 1981, the percentage of regular smokers in the Metro population aged 15 and over was 27.4 percent; this increased slightly to 27.9 percent in 1983, and then dropped to 24.8 percent in 1986.

Tables 4.2.1a and 4.2.1b of Appendix B contain more details concerning the smoking population.

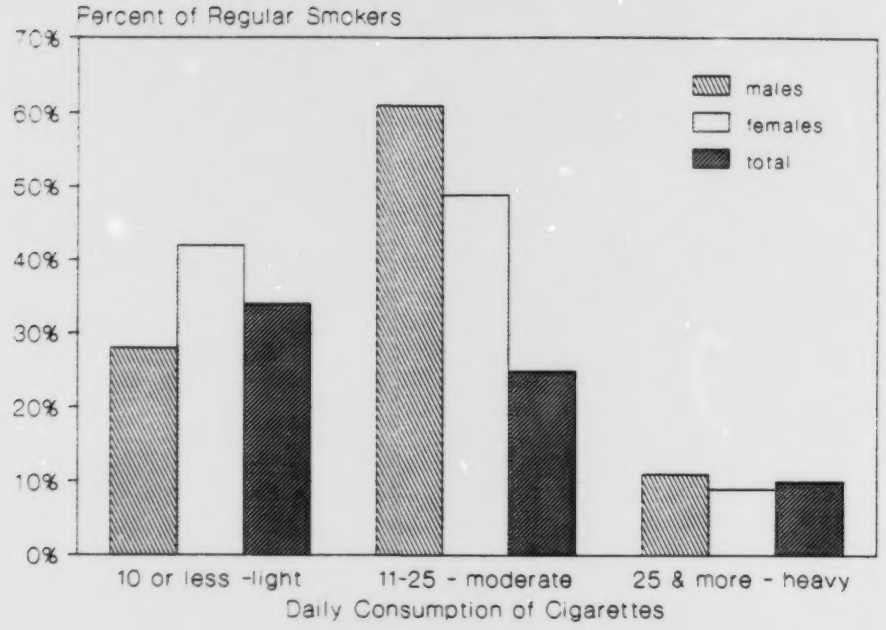


Figure 4.2.2 Level of Cigarette Consumption, TCHS 1988

4.2.2 Cigarette Consumption in the City

Turning to the City of Toronto, data on smoking behaviour are available from the two rounds of the Community Health Survey conducted in 1983 and 1988. However, these data are not strictly comparable to the national and provincial figures because different definitions and data collection methods were used.

In 1988, 32 percent of the TCHS respondents aged 15 and over were categorized as current smokers, that is, those claiming to smoke every day; this compared to the 36 percent observed in the 1983 survey. Men appeared more likely than women to smoke; the percentages of current smokers among males and females aged 15 and over were 34 percent and 27 percent respectively. This sex difference was found in all age groups.

Among current smokers, 35 percent were light smokers (10 or less cigarettes a day), 55 percent were moderate smokers (11-25 cigarettes a day), and 10 percent were heavy smokers (more than 25 cigarettes a day). Female smokers were more likely than male smokers to be in the light category; the percentage of light smokers among female smokers was 42 percent, compared to 28 percent of male smokers.

More details can be found in Table 4.2.2 of Appendix B.

4.3 ALCOHOL CONSUMPTION

The TCHS asked respondents if they had consumed any alcoholic beverages in the past twelve months. Twelve percent of males and 18 percent of females identified themselves as non-drinkers. Of these 148 self-proclaimed abstainers, 15 were known to be under 20 years of age.

Those who were drinkers were asked at what age they began drinking alcoholic beverages (not counting small sips). These data are summarized in Figure 4.3a. The median age at which both males and females claimed to have started drinking alcohol was 18 years of age. This was also the modal age for both sexes. Nineteen percent of all male respondents stated they began drinking alcohol before their 16th birthday. The corresponding figure for females was 17 percent.

The drinkers were also asked how many alcoholic drinks they had consumed during the seven days preceding the interview. A drink was defined as one 10 oz. can or bottle of beer, one 6 oz. glass of wine, or 1 oz. of liquor. The responses are summarized in Figure 4.3b.

The tendency for males to drink more alcohol than females is strongly supported by this data. At the low end of the scale, only 27 percent of all males as opposed to 42 percent of all females reported they had not consumed alcohol during the preceding week. An additional 20 percent of the females, and just 13.9 percent of the males reported one or two drinks for the preceding week, generally regarded as 'light' drinking. Moderate drinking, defined by the consumption of between 3 to 13 drinks over the week, was reported by 41.8 percent of males and 31.1 percent of females. The median numbers of drinks reported in this rather broad category was seven for males and five for females. The heavy drinkers, those consuming 14 or more drinks over the week, consisted of 17.3 percent of the males and 6.9 percent of the females. Furthermore, 3 percent of all males and less than .5 percent of the females claimed to have consumed more than thirty drinks during the relevant period.

In terms of age, the youngest and oldest drinkers were most likely to report light or no drinking during the past week; the relevant percentages of these respective age categories were 67.4 percent and 73.2 percent. Forty percent of those between the ages of 20-34 and 35-55 reported moderate drinking, along with between 21.7 percent and 29 percent of those in the other age groups. The rate of heavy drinking was highest in the 20-34 year old age group (13.8 percent), and lowest among senior citizens (4.1 percent).

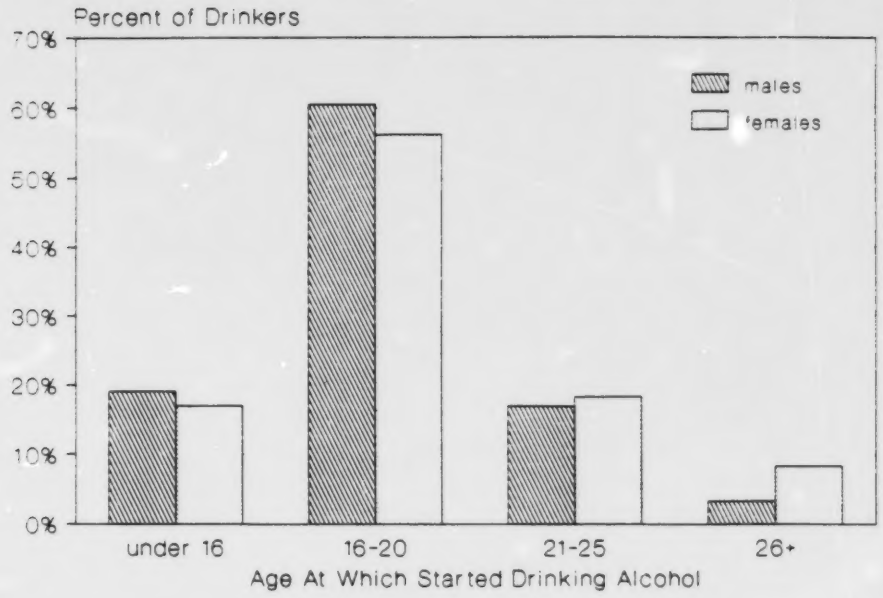


Figure 4.3a Age at Which Individuals Began Drinking Alcohol, TCHS 1988

Figure 4.3b Number of Alcoholic Drinks in One Week, TCHS 1988

4.4 OTHER SUBSTANCE ABUSE

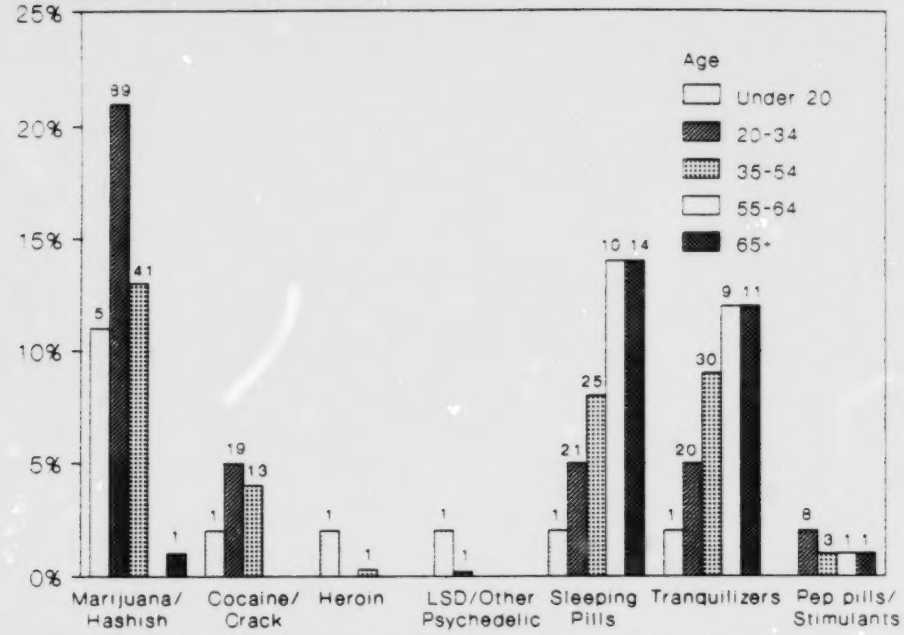


Figure 4.4 Reported Drug Use by Age, TCHS 1988

The Toronto Community Health Survey questioned respondents as to their use of various drugs during the twelve months preceding the survey. The reported patterns of use by age are illustrated in Figure 4.4. Before discussing the observed trends a strong word of caution must be noted. The total number of individuals reporting use of each drug is recorded on the graph. The small numbers of actual users contacted by the Community Health Survey must be considered by anyone using these data for general conclusions regarding the drug using population of the City.

As indicated in Figure 4.4 above, more respondents admitted to the use of marijuana than any of the other drugs mentioned. More males than females were marijuana users, with all but one of them under 55 years of age. A different pattern of use was reported for sleeping pills and tranquilizers, which followed marijuana in terms of popularity. Nine percent of females and 6 percent of males had used sleeping pills, while the use of tranquilizers was reported by 7 percent of males and females alike. Use of these two types of drugs was proportionally higher among individuals 55 years and older.

Lower rates of usage were found for the remaining drugs. For completeness, the reported age distribution of users for these other categories is also indicated in Figure 4.4. The very small numbers in these categories, however, again limit inferences regarding these drugs.

4.5 ACCESS TO FOOD

The Daily Bread Food Bank (DBFB) is a food collection and distribution agency that supplies food to food pantries, soup kitchens, shelters and hostels for distribution to those requiring food assistance. Their catchment area includes Metropolitan Toronto and the regional municipalities of Halton, Peel, York and Durham.

The DBFB estimates that in this area an average of 65,000 individuals per month benefit from food received in the form of food hampers. Another 19,000 per month receive emergency food through shelters, hostels, and soup kitchens. In 1988 food assistance was provided to an estimated 250,000 individuals. Many received assistance several times during the year. Based on the 1986 Census population for the Toronto Region (3.5 million), this represents 7.4 percent of all residents.

In February of 1989 the DBFB carried out a face to face survey of 1,188 households (3,523 individuals) receiving food assistance. Preliminary results indicate that those at increased risk for requiring food assistance include refugee claimants (18 percent of respondents), single parent families (34 percent), social assistance recipients (76 percent), households headed by someone who is long term disabled (20 percent) and children who are members of any of these families. Families with children make up 55 percent of all households using food programs.

When asked their reasons for requiring food assistance 66 percent stated that they simply did not receive enough money to meet their basic needs. The average household with 3 to 5 members receiving help from the DBFB did not have sufficient monies remaining after shelter costs to allow them to purchase a nutritious food basket as defined for the City of Toronto for February 1989 by Agriculture Canada. Those households not living in subsidized housing spent an average of 70 percent of their income on rent.

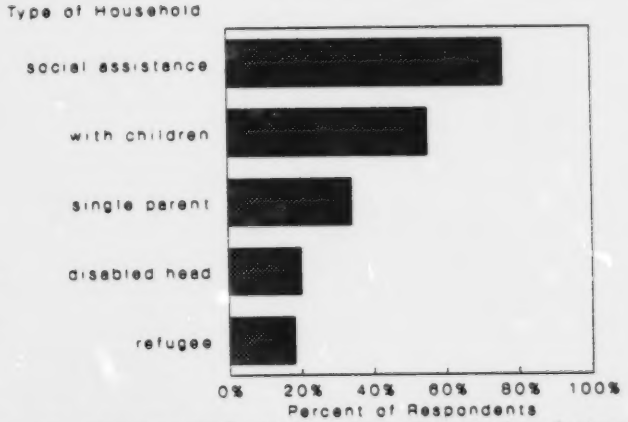


Figure 4.5 Households at Increased Risk for Food Assistance

4.6 DIETARY PATTERNS

The TCHS asked respondents about their frequency of eating foods from a variety of food groups. The majority of males and females continue to derive most of their protein from poultry and red meat, claiming to eat one and/or the other at least 2-3 times per week. Other sources of protein, including seafood, dried beans, lentils or tofu appeared to be less popular.

Eggs and cheese are still staple foods for many. Fifty percent claimed to eat eggs at least 2-3 times per week while 8 percent said they eat them every day. Cheese was eaten daily by 26 percent of respondents. Other staples appeared to be whole grain breads or cereals, eaten by 72 percent every day, and fruits and vegetables, consumed daily by 79 percent of respondents.

Respondents were also asked how much they were limiting their intake of sugar, salt and fat. Figure 4.6b displays the findings for each sex. In each of the three areas, approximately 50 percent of all respondents were limiting their consumption somewhat or very much. In each category more females than males were limiting their intake very much and more males were not limiting their intake at all. This finding was consistent across all age groups with the exception of those aged 65+. In this age group males were more likely than females to be limiting their intake of each of these substances. For both sexes the percent of respondents limiting these foods increased with age.

Respondents were also asked about the frequency with which they drank a variety of beverages. On average, respondents drank 3 cups of coffee or tea with caffeine each day. One fifth of all respondents drank five or more cups per day. Sixty-five percent of males and 71 percent of females drank only one or fewer glasses of milk per day. In both sexes those under age 20 were the heaviest milk drinkers. Generally, of those aged 35 and over, approximately 55 percent drink one or more glasses of milk per day. The only exception to this is females aged 55-64, of whom 65 percent are milk drinkers. This may in part be due to promotion campaigns around the importance of calcium in the diet of older women. Among milk drinkers skim milk was chosen more frequently by females (20 percent) than males (14 percent).

The majority of respondents did not drink soft drinks on a daily basis. More males (8.6 percent) then females (4.7 percent) drank three or more servings per day. Among pop drinkers, diet pop was chosen more frequently by females (53.3 percent) than males (28.4 percent).

Both males and females drank an average of 1.3 glasses of fruit or vegetable juice each day.

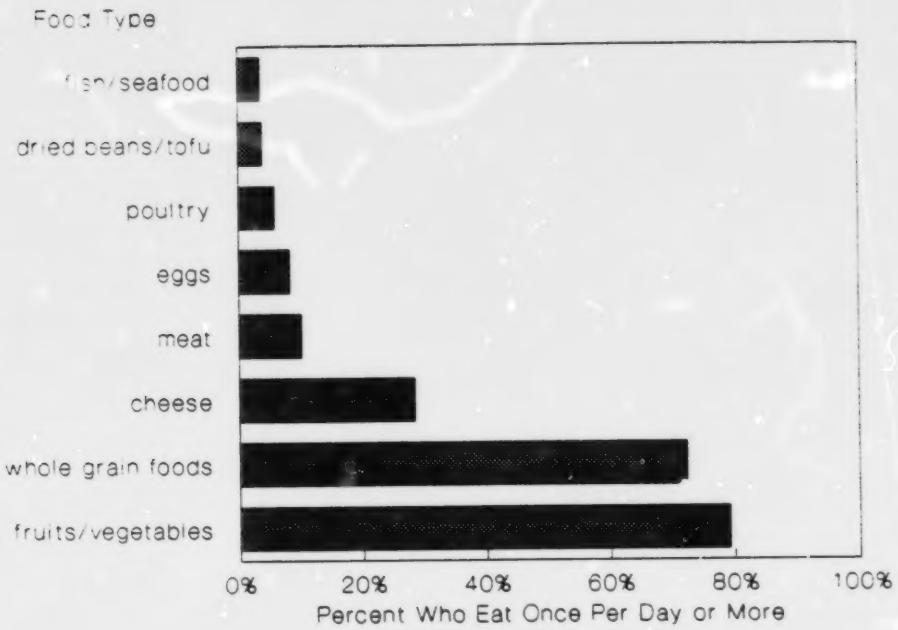


Figure 4.6a Frequency of Consumption of Various Foods, TCHS 1988

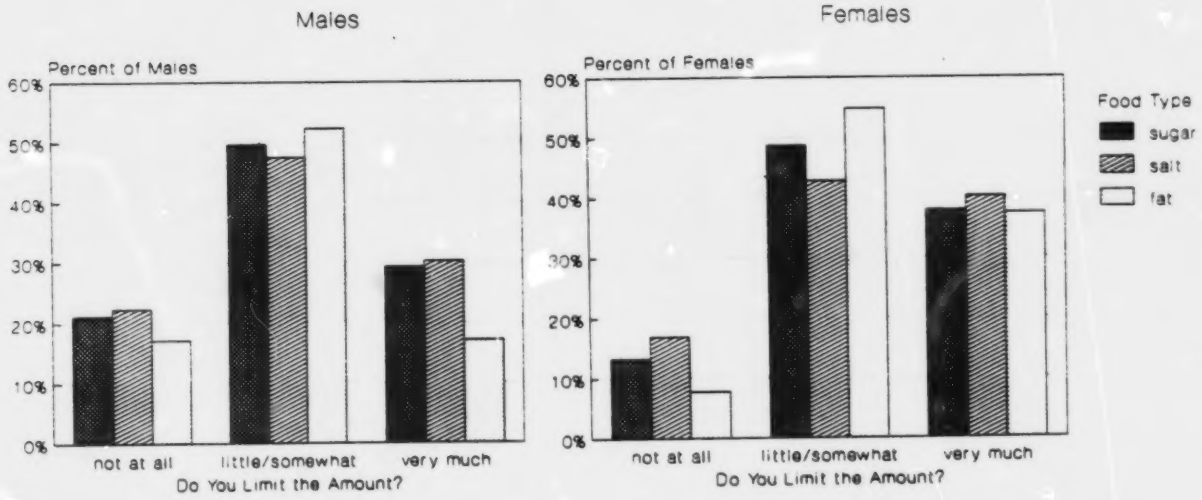


Figure 4.6b Limitation of Various Foods, TCHS 1988

4.7 BODY MASS INDEX

A Body Mass Index (BMI) was calculated for all TCHS respondents aged 20 to 65 who responded to the questions on both height and weight. BMI is calculated as weight in kilograms divided by height in metres squared. In the absence of a direct measure of body fat, the BMI is the most satisfactory index based on height and weight. The index is not applicable to adolescents (under 20) or seniors (those above age 65).

BMI zones are defined as follows:

Under 20	- may be associated with health problems for some people
20-24	- good weight for most people
25-27	- may lead to health problems in some people
Over 27	- increasing risk of developing health problems

Generally, a BMI of between 20 and 27 is considered acceptable.

For both males and females, approximately 61 percent of respondents had a BMI in the optimal range of 20 to 24. Twenty-two percent of females had a BMI of less than 20 compared with 5 percent of males. On the higher end of the range, 15 percent of males had a BMI greater than 27 compared to only 9 percent of females. In both sexes BMI was seen to increase with age.

Males aged 50-65 had the highest proportion of individuals with a BMI greater than 27 (25 percent). Females aged 20-29 had the highest percent of those with a BMI less than 20 (32 percent). BMI by age for males and females separately is shown in Figure 4.7.

Respondents were also asked if they would like to weigh more, less or about the same as their current weight. Forty-nine percent of the males wished to weigh less, 38 percent to remain the same, and only 14 percent wanted to weigh more. The corresponding percentages for females were 35 percent, 60 percent and 5 percent respectively. Surprisingly, it seemed that more males than females worried about overweight. Of those who had a BMI less than 20, 55 percent of males and 66 percent of females still expressed a desire to weigh less.

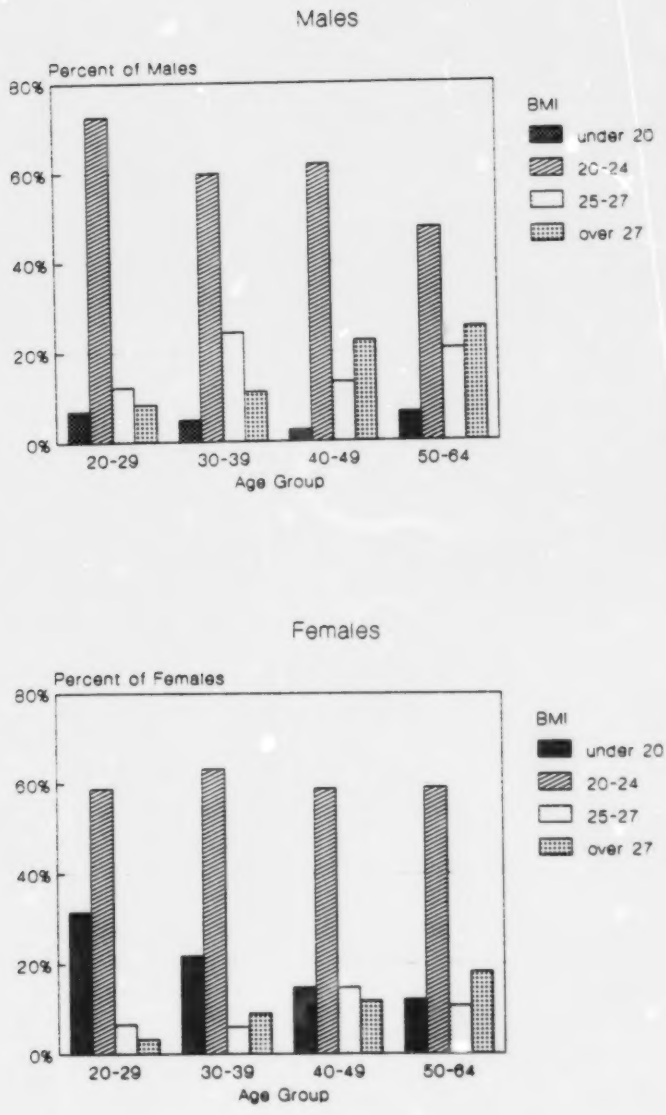


Figure 4.7 Body Mass Index by Sex and Age, TCHS 1988

4.8 SEXUAL BEHAVIOUR AND CONTRACEPTIVE PRACTICES

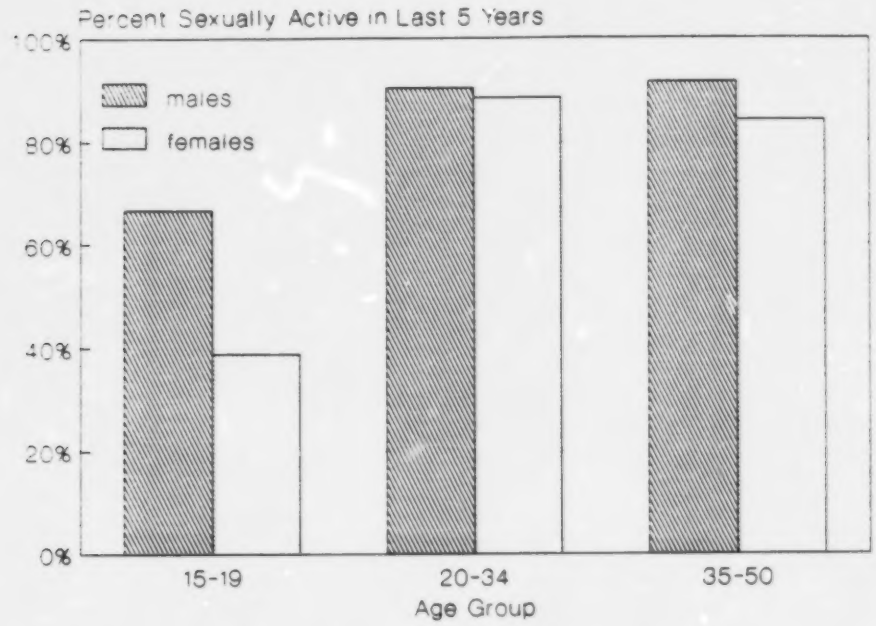


Figure 4.8.1 Sexual Activity by Age, TCHS 1988

4.8.1 Sexual Behaviour

Respondents to the TCHS under age 50 were asked a series of questions regarding their sexual behaviour. The response rate for this set of questions was 95 percent.

Ninety percent of males and 85 percent of females had been sexually active during the past five years. Of the 42 respondents aged 15 to 19, 55 percent claimed they had been sexually active (67 percent of males, 39 percent of females). Males were more likely than females to have had two or more sexual partners during the past five years (55 percent vs 37 percent). For both sexes, those under the age of 35 were more likely to have had 2 or more partners than those 35 to 50 (50 percent vs 39 percent).

Of those who had two or more sexual partners in the past five years, 72 percent of males and 69 percent of females were doing something to protect themselves from sexually transmitted diseases (STD). Of the 15 respondents aged 15 to 19 who had had two or more partners, all but one were protecting themselves from STD. The most common method of protection used was condoms, either alone or in combination with foam (71 percent of males, 68 percent of females).

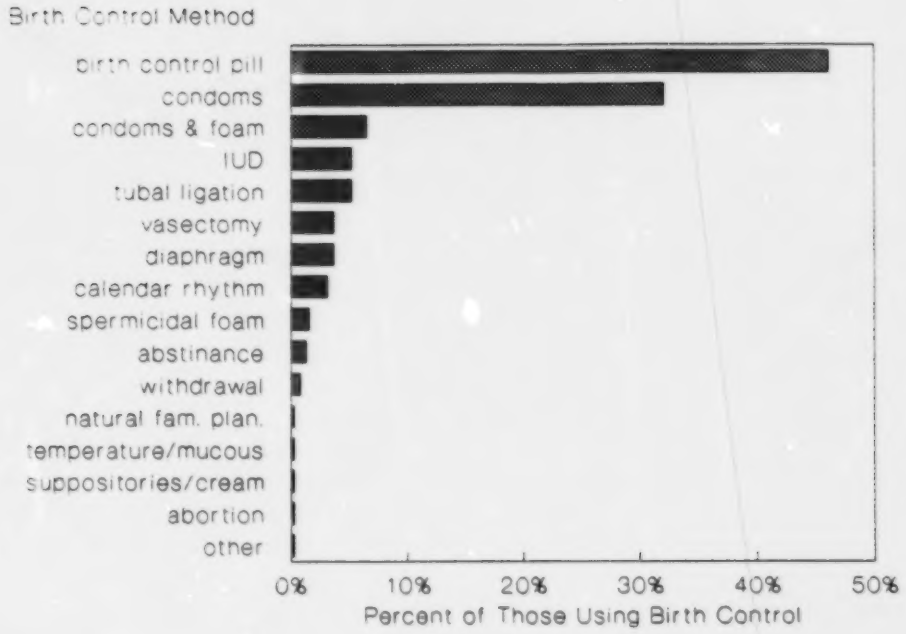


Figure 4.8.2 Birth Control Methods Used, TCHS 1988

4.8.2 Contraceptive Practices

Of those who had been sexually active in the past five years, 65 percent of males and 66 percent of females were using some form of birth control. In both sexes, the percent using birth control decreased with age. Birth control was used by 82 percent of those aged 15 to 19, 75 percent of those 20 to 34 and 50 percent of those 35 to 50 years of age.

The most common methods of birth control used were birth control pills (46 percent) or condoms (38 percent), used either alone or in combination with foam. Those 35 to 50 years of age were much less likely to use the birth control pill than those under 35 (17 percent vs 58 percent). The IUD was used more frequently (15 percent) by this older group, as were permanent methods of birth control such as vasectomy (10 percent) or tubal ligation (16 percent). These methods were rarely used by those under age 35.

Of those who were sexually active but not using birth control, 30 percent were either unable to have children themselves or were with a sterile partner.

4.9 WOMEN'S PREVENTIVE HEALTH PRACTICES

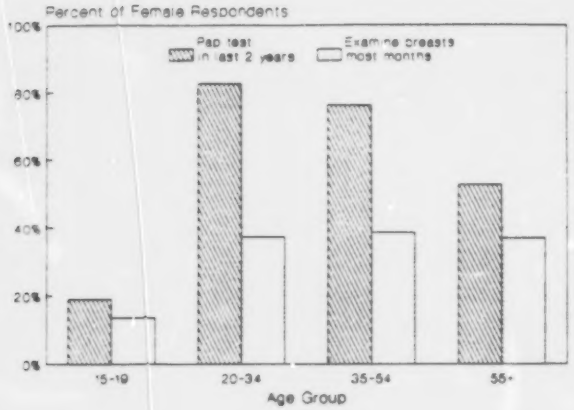


Figure 4.9 Frequency of Screening Practices, TCHS 1988

Female respondents to the TCHS were asked questions regarding preventive health practices specific to women. These data are summarized in Figure 4.7.

While 76 percent of females aged 15-19 had never had a pap smear, the majority of those in the older age groups had been tested within the last two years. The most conscientious group with respect to pap smears appeared to be those between the ages of 20 and 34, with 83 percent claiming to have been tested within the past two years. According to the Canadian Cancer Society, women should receive their initial PAP smear either at the start of their sexual activity or, for those not sexually active, at 18 years of age. Following two normal annual smears, repeat tests are recommended at three year intervals for women under age 35 and at five years intervals for those 35 and older.

Seventy-nine percent of all female respondents had received a breast examination from a nurse or doctor within the last two years. Of those aged 15-19, only 48 percent had been examined compared to 80 percent of those 20 or older.

Breast self examination was reportedly carried out by 67 percent of female respondents, including 69 percent of those 20 or older. However, only 55 percent of those who claimed to examine their own breasts said they do so most months or every month. The remainder do so only occasionally or rarely. While breast examination is unlikely to reveal pathology in women under 30 years of age, monthly self-examination is recommended for all women twenty years and older, as the start of a life-long habit.

4.10 PREVENTIVE DENTAL PRACTICES

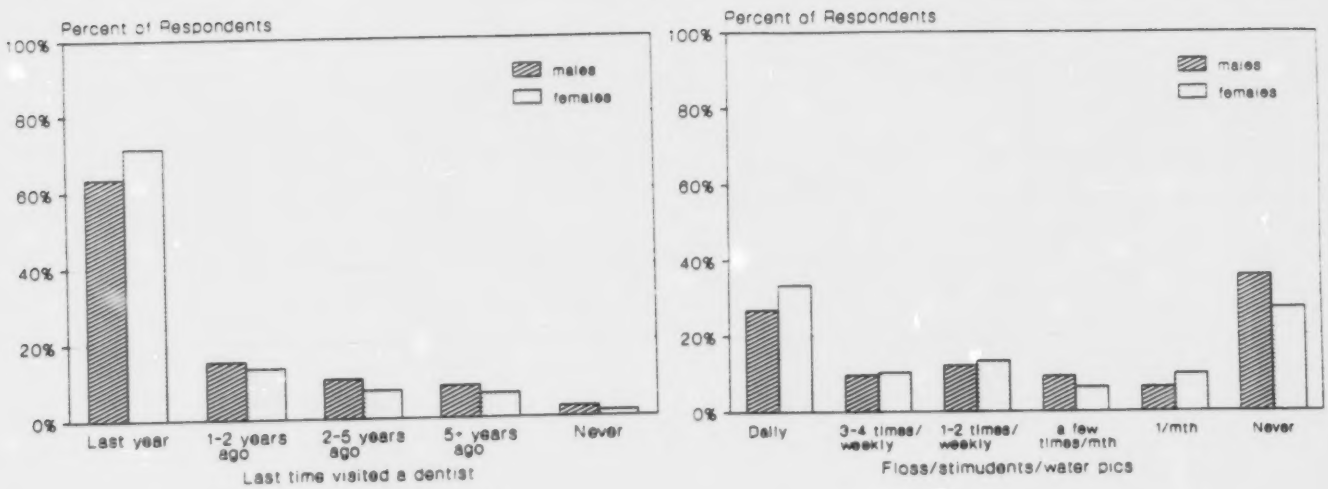


Figure 4.10 Frequency of Dental Check-ups and Preventive Dental Practices by Sex, TCHS 1988

Two of the questions included in the TCHS focused on dental practices. In the first, respondents were asked when they had last visited a dentist. Over 67 percent of the sample claimed to have done so within the past year, while an additional 14 percent had seen a dentist within the past two years. As illustrated in Figure 4.10, females tended to have seen a dentist more recently than males. At the other end of the scale, 7 percent of the respondents had not seen a dentist in more than five years. An additional 20 individuals (2 percent of respondents), including 13 males and 7 females, had never received any dental care. Looking at this question in terms of the respondents' ages, younger people tended to have made more recent dental visits. Those who had not been to a dentist in over five years included 13 percent of those aged 55-64 as well as 23 percent of those aged 65 and over.

A second question probed the use of dental floss, stimudents, and water pics. Thirty percent of respondents indicated practising such preventive measures on a daily basis, while an almost equal number, 31 percent, claimed never to do so. As indicated in Figure 4.10, females again appeared more conscientious with respect to dental hygiene. Older individuals were generally less attentive to these practices than their younger counterparts.

4.11 PHYSICAL ACTIVITY

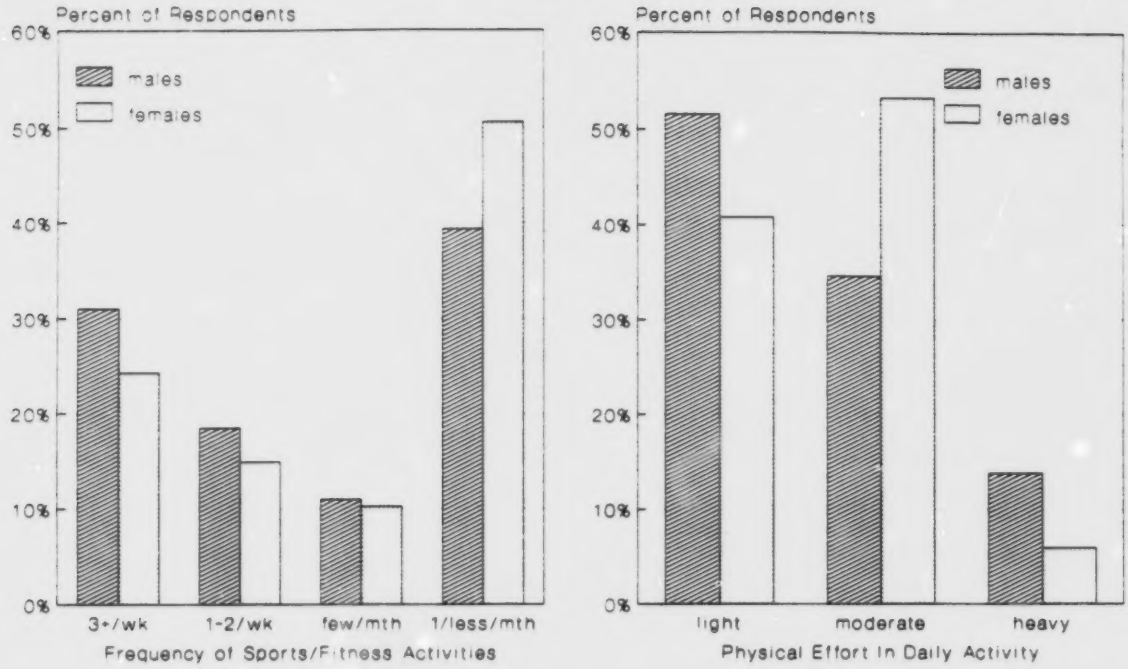


Figure 4.11 Measures of Physical Activity by Sex, TCHS 1988

TCHS respondents were asked if they participated in fitness or sports activities. Thirty-one percent of males and 25 percent of females said that they participated three or more times per week, while 39 percent of males and 51 percent of females said that they participated only once per month or less. The rate of participation decreased with age in both sexes.

A second question investigated participation in lighter physical activities, such as gardening, dancing, or walking. The majority of respondents claimed to do so three or more times each week (55 percent of males, 62 percent of females). Only 15 percent of males and 13 percent of females engaged in such light activity as infrequently as once a month or less. The rate of participation in lighter exercises did not decrease with age.

Respondents were also asked to describe the amount of physical effort required in their daily activities. Fourteen percent of all men indicated heavy daily exertion (such as pushing or lifting objects), as compared with six percent of all females. Somewhat surprisingly, light daily activities only (such as office work, driving, or sitting) were also described by more males (52 percent) than females (41 percent), with all remaining individuals in the moderate category.

4.12 SEATBELT USE

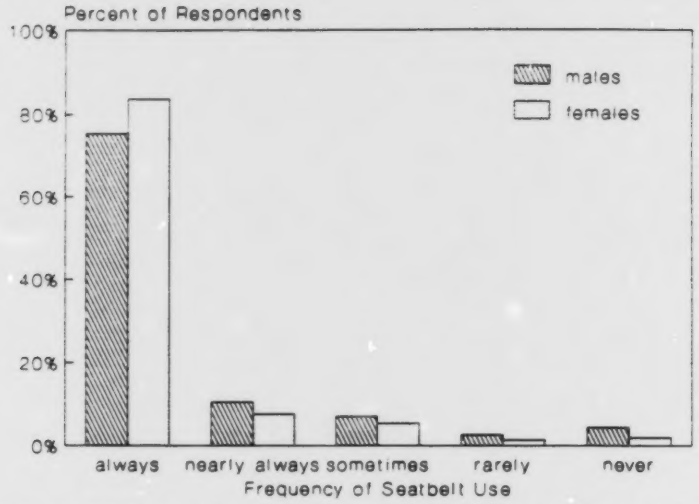


Figure 4.12 Reported Seatbelt Use by Sex, TCHS 1988

Seatbelt use is very important to the safety of drivers as well as passengers in the event of a traffic accident. The Ontario Ministry of Transportation reports that in 1987, 86 percent of drivers were wearing seatbelts when involved in crashes. Of these, a majority (82 percent) were not injured. Those drivers not wearing seatbelts when a collision occurred were 21 times more likely to be killed and 76 times more likely to be hospitalized than belted drivers.

Figure 4.12 illustrates the pattern of seatbelt use reported in the TCHS. Most of the respondents (80 percent) indicated they always wore seatbelts when riding in a car. This most conscientious group included 84 percent of all females compared with 75 percent of the males.

At the other end of the scale, only 3 percent reported never having used this precaution, including 4 percent of all males as opposed to only 2 percent of females. Age appeared to also influence seatbelt use. For both sexes, those under 19 years of age were the least likely to report always wearing a seatbelt.

The TCHS also revealed that of the respondents who drove with children in their cars, 84 percent always insisted their children use a seatbelt or child restraint, 11 percent nearly always, and 6 percent sometimes insisted. There were no responses in the 'Rarely or never' category for this question. Again, females were more likely to always insist on seatbelt use than males (86 percent vs 82 percent). Age also appeared to be of significance, but with younger respondents showing more attention to the seatbelt use of these passengers.

4.13 TRAFFIC ACCIDENTS

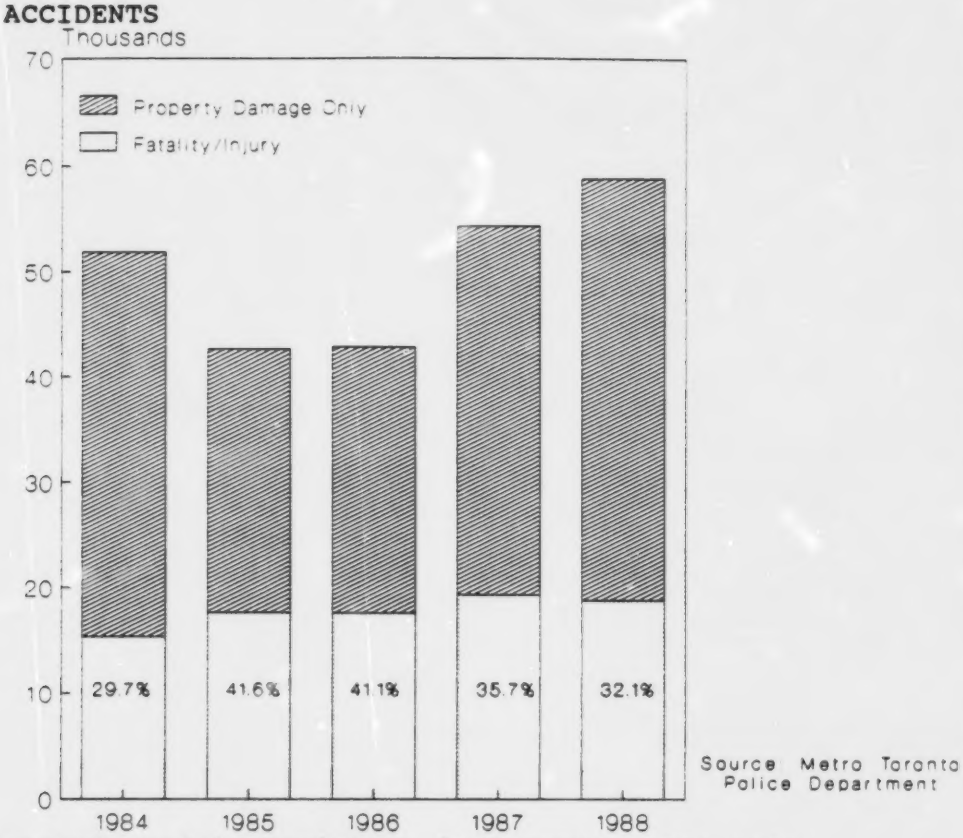


Figure 4.13 Reported Traffic Accidents in Toronto, 1984-1988

Figure 4.13 illustrates the number of traffic accidents reported to Metro Toronto police during each of the past 5 years. Evident from the graph is a sharp decrease (18 percent) in this total for the year 1985 from the preceding year, followed by a sharp increase (27 percent) from 1986 to 1987. A further annual increase of 8.1 percent was reported in 1988.

Metro police categorize all reported accidents as either fatal, personal injury, or property damage accidents. The categories are mutually exclusive, with each accident being labelled according to its most serious consequence. For example, an accident involving both personal injury and property damage would be included only in the personal injury category. Considering these consequences, it should be noted that although the total number of reported accidents dropped by nearly 18 percent in 1985, the number of those involving either personal injury or death actually increased both in number and accordingly, as a percent of the total. Conversely, the increase in the total number of accidents in both 1987 and 1988 is largely due to increased reports of property damage accidents.

4.14 ALCOHOL RELATED TRAFFIC ACCIDENTS

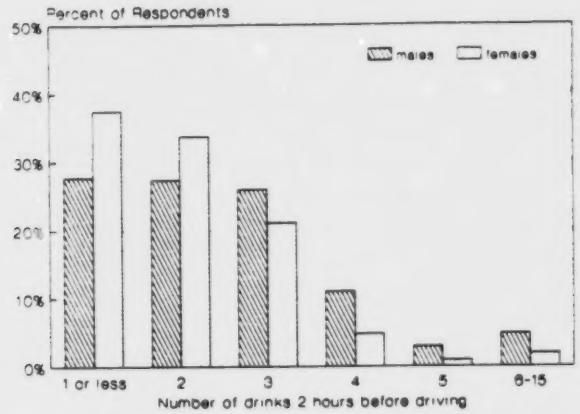


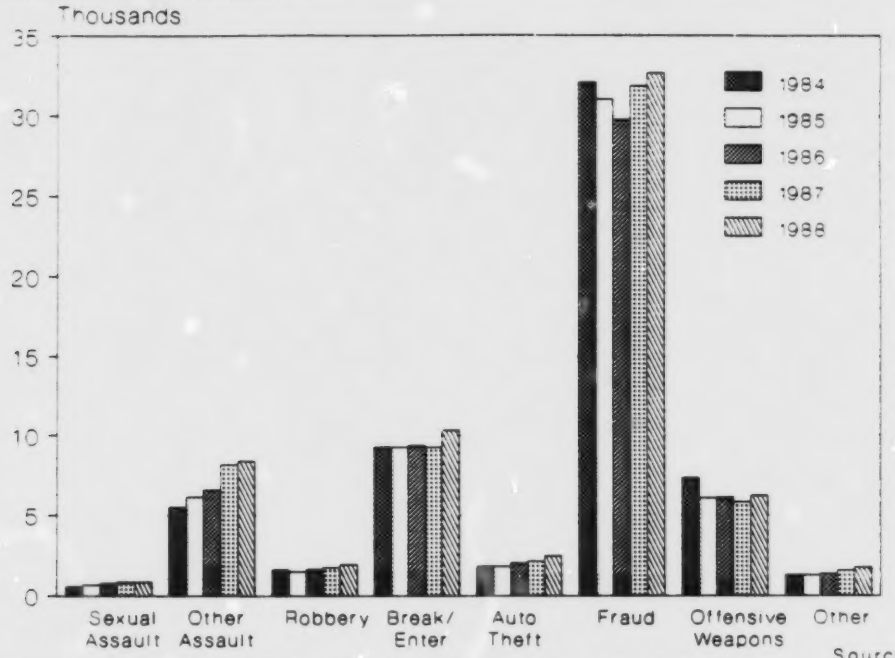
Figure 4.14 Number of Drinks Before Driving by Sex, TCHS 1988

Metro Police statistics indicate an alarming number of drivers on our roadways under the influence of alcohol. This deadly practice resulted in more than 3000 reported traffic accidents during 1988. This figure represents the highest number of drinking driving accidents on record in Metro since 1984.

Further evidence of drinking and driving was found in the responses to the Toronto Community Health Survey. Among 515 licensed drivers included in this sample, 20 percent admitted they had driven a vehicle within two hours after alcohol consumption during the preceding month. Half of these individuals had done so on 1 or 2 occasions, while the rest admitted to drinking after driving three or more times during this period. More disturbingly, 2 percent of all of drivers in the sample claimed to have combined drinking and driving on at least 15 occasions during the month. All but one of these individuals were males, all over 19 years of age, including two senior citizens. These figures must be interpreted cautiously as the Toronto Community Health Survey does not purport to represent either the population of Toronto in general or the driving population with respect to age or sex. These numbers do, however, indicate that the problem of drinking and driving is not restricted to teenaged drivers.

To provide more insight into the amount of alcohol being consumed, drivers responding to the survey were also asked how many drinks they might consume over a three hour period before worrying about their ability to drive. Over 38 percent believed more than two drinks could be consumed without harm, with 10 percent of this latter group indicating they would not worry about six drinks or more. The suggestion that heavy drinking before driving is more prevalent in males is seen in Figure 4.14.

4.15 CRIME AND VIOLENCE



Source: Metro Toronto Police Department

Figure 4.15 Reported Crimes in Toronto, 1984-1988

The frequency with which selected crimes were reported to Metropolitan Toronto Police during each of the past five years is illustrated in Figure 4.15. These statistics pertain to totals for police divisions within the City of Toronto. As these areas do not lie uniformly within the City boundaries, some estimation has been necessary.

Generally, the numbers of reports of various types of crime have either remained constant or slightly increased over the period studied. The number of crimes reported in 1988 is at a high for all but the offensive weapons category, which has been relatively stable since 1985. As this data does not adjust for changes in population size over the relevant period, caution is advised in concluding that the rate of criminal activity has increased in the City. Moreover, the fact that the figures represent reported crimes only is vital to any further analysis.

Conspicuously absent from Figure 4.15 is a representation of the statistics pertaining to the number of murders in the City. These crimes occur so infrequently that the data cannot be conveniently represented graphically with other crime data. The occurrence of murder in Toronto ranged from a low of 12 in 1987 to a high of 31 in 1986. For each of the remaining years, the numbers of reported murders held steady at either 23 or 24 reports per year.

Chapter Five
Healthy Environments

5.1 INTRODUCTION AND SUMMARY

The health of an individual is affected by a complex and interacting set of health determinants. Although the most immediate influence upon the individual may be the family, from whom health habits and practices, (both helpful and harmful), are acquired, the individual's and the family's health are in turn influenced by a variety of factors. These include genetic inheritance, socio-economic status, psycho-social influences, and the immediate physical environment at home, school, work and neighbourhood. This latter category of environmental influences, including air and water quality, chemical exposure, and occupational hazards, are the focus of this chapter.

Once again data collected through the 1988 Toronto Community Health Survey forms the basis for most of this chapter. Analysis of the responses to the environmental questions posed by the survey indicate the following:

* Torontonians are concerned about the City's environment. A majority of those surveyed felt it had deteriorated over the past five years.
* Concerns about water pollution have motivated many to find alternatives to daily tap water use.
* Hazardous workplace exposures are also on the minds of Toronto residents. Exposure to chemicals and pollutants were the most frequently cited concerns, followed by the risk of accidents, biological hazards, and radiation.

Public concern over these issues is an essential element to the promotion of change in the use and abuse of our environment. Sixty-one percent of individuals surveyed expressed this concern and twelve percent of respondents actually participated in groups focusing on these issues, as noted in Section 3.4 of this report. Our consciousness has been raised; we must now focus on fostering a greater sense of public responsibility for improvement.

5.2 CONCERN ABOUT THE ENVIRONMENT

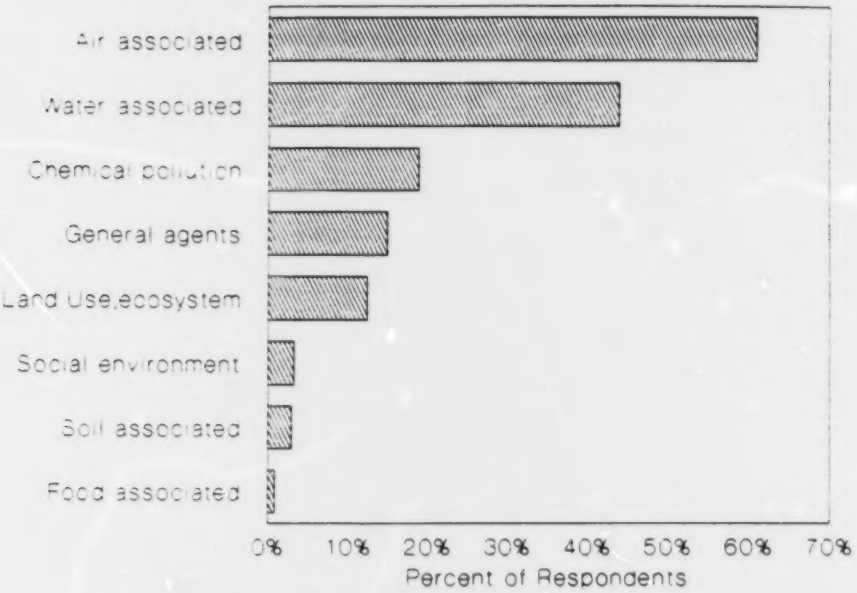


Figure 5.2 Profile of Environmental Concerns, TCHS 1988

In the 1988 TCHS, several questions were asked pertaining to environmental concerns. Sixty-one percent of the respondents indicated dissatisfaction with the local environment. This finding was consistent across age and sex. Moreover, while only 7 percent felt that the City's environment had improved in the last five years, 52 percent thought it had deteriorated. Women tended to be more critical than men in this respect. The pattern of response was not apparently age related.

More specifically, respondents were asked to list the environmental issues which most concerned them. Nine hundred and one respondents identified one or more problems. Air pollution and associated problems formed the most popular category of environmental concern, raised by a majority (61 percent) of all respondents. The next most frequently cited area was that of water associated problems, with 44 percent indicating concern on this issue. Other environmental problems listed included chemical pollution (19 percent of respondents), general and non-chemical agents (15 percent), land use and waste management (13 percent), soil contamination (3 percent), and food associated problems (1 percent).

About 37 percent of the respondents reported suffering from one or more ill-defined symptoms, possibly related to environmental factors. These included, in descending order, non-migraine headaches (19 percent), coughing or shortness of breath (14 percent), itching or burning eyes, nose or throat (12 percent), and skin rashes and irritations (10 percent).

5.3 PASSIVE SMOKING

Passive smoking refers to the unwanted exposure to and inhalation of cigarette smoke by non-smokers as consequence of being in proximity to smokers. Adult non-smokers exposed to tobacco smoke under controlled conditions in a closed room absorb carbon monoxide and nicotine as a result of breathing tobacco smoke contaminated air. As a result of passive smoking, the majority of urban non-smokers have nicotine in their body fluids for most of their lives.[1]

Since the 1970's, the consensus has been that prolonged exposure to indoor tobacco smoke increases the risk of lung cancer in healthy non-smokers. Although this risk is far lower than that due to active smoking, it still generates substantial public health concern.

Exposure to passive smoke also causes eye irritations, headaches, nasal symptoms and cough among healthy non-smoking adults. In children exposed to indoor cigarette smoke, increased respiratory infection and illness are reported. Children of smoking parents also have an increased frequency of respiratory infections, and a slightly lower lung function growth rate when compared with children of non-smoking parents.

Among the respondents to the TCHS who were working at time of the survey, 39 percent reported exposure to second-hand smoke at their work place. Men were more likely than women to suffer from passive smoking; forty-three percent of working men compared to 33 percent of employed women were exposed to the cigarette smoke of others at work.

Twenty-three percent of the households responding to the TCHS 1988 reported a smoking member. Seventy percent of these households had three or more persons living together, indicating a potentially high exposure rate to second-hand smoke. However, the large majority of these 'smoking households' (95 percent) did not include preschool and grade school children.

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[1]Russell, M.A.H. and C. Feyerabend, 1975, "Blood and Urinary Nicotine in Non-Smokers", The Lancet, 1975, pp.179-181.

5.4 BOTTLED WATER USE

Figure 5.4 Use of Water, TCHS 1988

Alternatives to tap water were used daily by 22 percent of the TCHS respondents. Fourteen percent drank or cooked with bottled water, 11 percent with filtered or specially treated water, and 3 percent used both.

Reasons for not using tap water included: concern about chemicals in the water which may cause health problems (52 percent of respondents), and unpleasant taste or smell (31 percent of the respondents). More women than men used filtered or treated water. Younger residents of the City were more likely to consume bottled water, while greater proportions of older age groups chose filtered or treated water.

5.5 HOME CHEMICAL USE

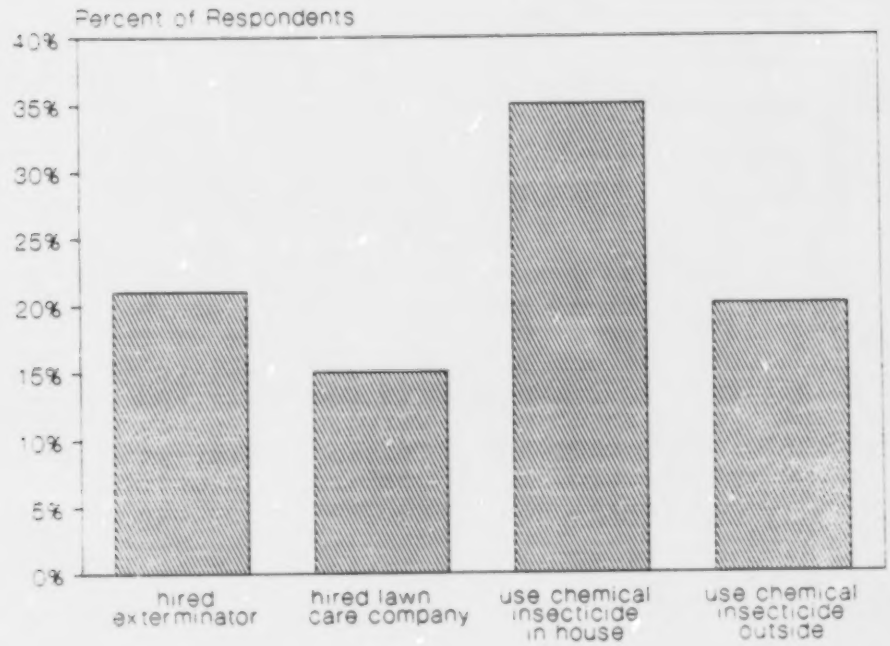


Figure 5.5 Use of Chemicals, TCHS 1988

The use of chemical pesticides was reported frequently in the TCHS. Of all respondents, 21 percent reported having hired an exterminator in the previous year, 15 percent had hired a lawn care company, 35 percent had used a chemical insecticide in the house, and 20 percent had used a chemical pesticide outside the house. There was no notable trend associated with age or gender in regard to the use of chemicals at home.

5.6 OCCUPATIONAL EXPOSURES

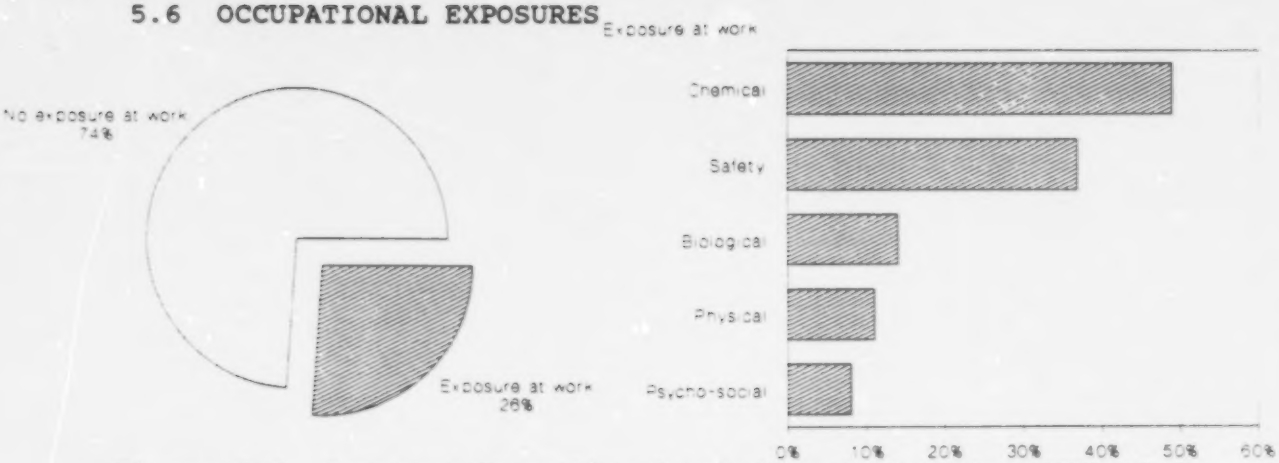


Figure 5.6 Concerns Regarding Occupational Hazards, TCHS 1988

Respondents to the 1988 TCHS who had jobs were asked about their exposure to any risk of accidents, injuries, or hazardous substances while at work. Twenty-six percent of these individuals enumerated one or more such workplace exposures. As indicated in Figure 5.6, exposure to chemicals and pollutants was the most common concern of these workers, cited by 49 percent of those concerned with occupational risks. Thirty-seven percent of these workers were worried about work-related accidents, including those involving tools and machines, fire and burns, traffic, and falls. Biological hazards, including exposure to infectious disease, parasites, or toxic plants or animals concerned 14 percent. Physical exposures, including radiation of various types, were raised by 11 percent of these workers, followed by psychological hazards such as violence and crime, cited by 8 percent.

Exposure to some form of risk was highest among those working in skilled crafts and trades, with 61 percent of this group indicating one or more job related risks. Technicians were the next most concerned group, with 56 percent listing hazardous conditions or substances. Managers, supervisors and those in clerical, sales or service job were least likely to experience risk; only 15 percent in each of these categories reported such concerns.

Looking at the types of risk with respect to occupation, those in skilled crafts and trades and technicians were those most concerned with exposure to chemicals and other pollutants, with 27 percent of these workers reporting such risks. Technicians were also the most likely to be exposed to biological agents, with 17 percent citing exposure. Safety related risks were highest among those working in skilled crafts and trades (48 percent), unskilled labour (25 percent), or semi-skilled crafts and trades (22 percent).

5.7 AIR QUALITY

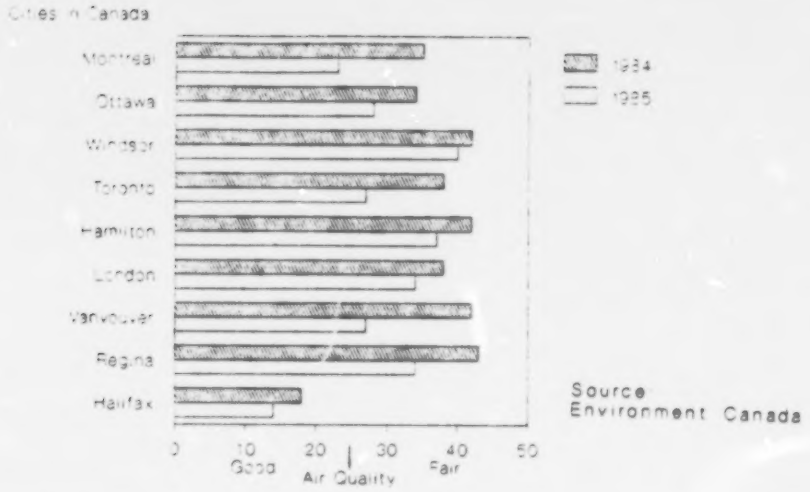


Figure 5.7 Comparison of Air Quality Index, Major Canadian Cities, 1984 & 1985

Measurement of the air quality for major cities across the country were prepared annually by Environment Canada for the years 1974 through 1985. As a guide to interpretation of the following discussion, ratings of between 0 and 25 indicate 'good' air quality, scores between 25 and 50 denote 'fair' readings, while scores above 50 are 'poor'. This index showed little change in the ambient air of Metropolitan Toronto for the eleven years between 1974 and 1984; ratings of 'fair' were obtained throughout this period.

The situation was more encouraging in 1985. Of the six stations measuring air quality, three showed much improvement in the reading of the index. More specifically, the Breadalbane Street Station yielded an average of reading 27 which compared with 42 of the preceding year; the Lawrence and Kennedy Station dropped from 38 in 1984 to 26 in 1985, and the Science Centre Station gave a low reading of 20, the only "good" grade throughout the twelve-year period.

A brief comparison of Metro Toronto with other Canadian cities is presented in Figure 5.7 for the years 1984 and 1985. In 1984, the air quality of Toronto compared favourably to that of Windsor, Hamilton, and Regina, but was worse than Montreal, Vancouver, and Halifax. The improvement noted within Toronto for 1985 is again evident when compared with other locales.

A composite index for air quality has not been calculated since 1985. It has been replaced by measurement of individual pollutants although results are not yet available.

Chapter Six
Reproductive Health

6.1 INTRODUCTION AND SUMMARY

In this chapter we present data for two aspects of reproductive health: birth and induced abortion.

An extensive data base on births to City of Toronto residents is maintained by the Statistical Services Unit of the Community Health Information Section. These data clearly document the trend to delayed pregnancy that has emerged over the past decade.

There were 8,995 births to City of Toronto women in 1988. The Crude Birth Rate increased slightly again, to 14.6 births per 1,000 women. Average maternal age may have levelled off, however; it was 28.8 both in 1987 and 1988 after several years of increases. Parity, that is the number of live births a woman experiences, decreased again slightly, and the average maternal age of women who experienced their first birth continued to increase in a stepwise fashion.

The low birth weight rate continued to fluctuate between five and seven percent, with one in five low birth weight infants in the high risk category of less than 1500 grams.

Data on the birthplace of Toronto women who themselves gave birth in 1988 provide indirect evidence of changes in the nature of Toronto's multicultural society. More than half of the 8,995 births recorded in 1988 were to women born outside of Canada. The major places of origin were Portugal, the Caribbean and other places in Latin America, Southeast Asia, and China.

We are unable to present complete data on the number of induced abortions performed for City of Toronto residents in 1988. The Ministry of Health has provided data indicating that 6,399 induced abortions were performed for City residents in hospitals. An increasing number of abortions are being performed in free-standing clinics, however.

Other aspects of reproductive health are dealt with in other chapters of this report: sexual behaviour and contraceptive practices (Section 4.6) and women's preventive health practices (4.7) are presented in the context of health-enhancing behaviours; sexually-transmitted disease (7.2) and AIDS/HIV (7.3) are discussed in the context of morbidity; and stillbirth (8.2) and perinatal mortality data (8.4) are presented in the chapter on mortality.

6.2 CRUDE BIRTH RATE AND MATERNAL AGE

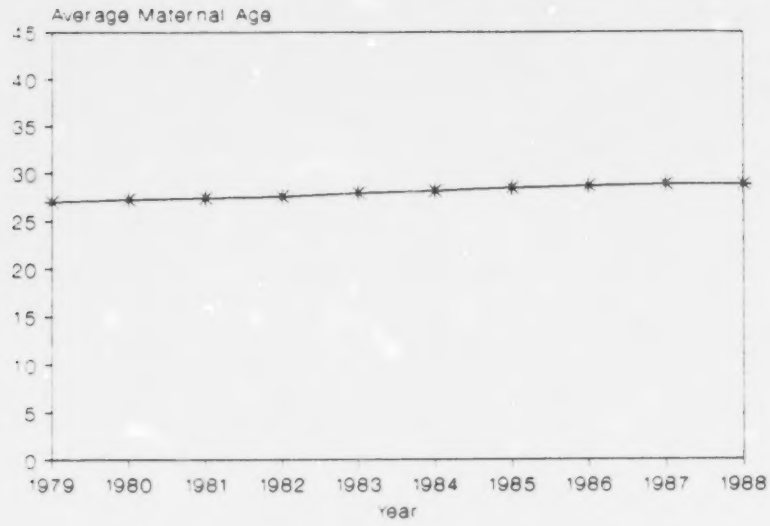


Figure 6.2 Average Maternal Age, City of Toronto, 1979-1988

There were 8,995 live births to women living in the City of Toronto in 1988. The result was another slight increase in the crude birth rate, that is, in the number of live births per 1,000 population. A decade ago the crude birth rate stood at 13.3; it reached a low point in 1981 of 12.7 and has slowly increased since then to 14.6 (see Table 6.2a in Appendix B).

The crude birth rate pattern reflects changes in the average maternal age over this period. The mean age of women who gave birth in 1979 was 27. Figure 6.2 shows how the average maternal age has gradually increased every year since then; in 1987 it levelled off at 28.8. The total fertility rates and age-specific fertility rates presented in Section 2.4 tell the same story.

These data record the trend to delayed pregnancy that has developed over the past decade. The unusually low birth rates in the early eighties were the result of the first cohort of women who delayed their first birth. As subsequent cohorts work their way through the age structure, these rates will probably stabilize.

Table 6.2b in Appendix B provides more detail on maternal age.

6.3 PARITY

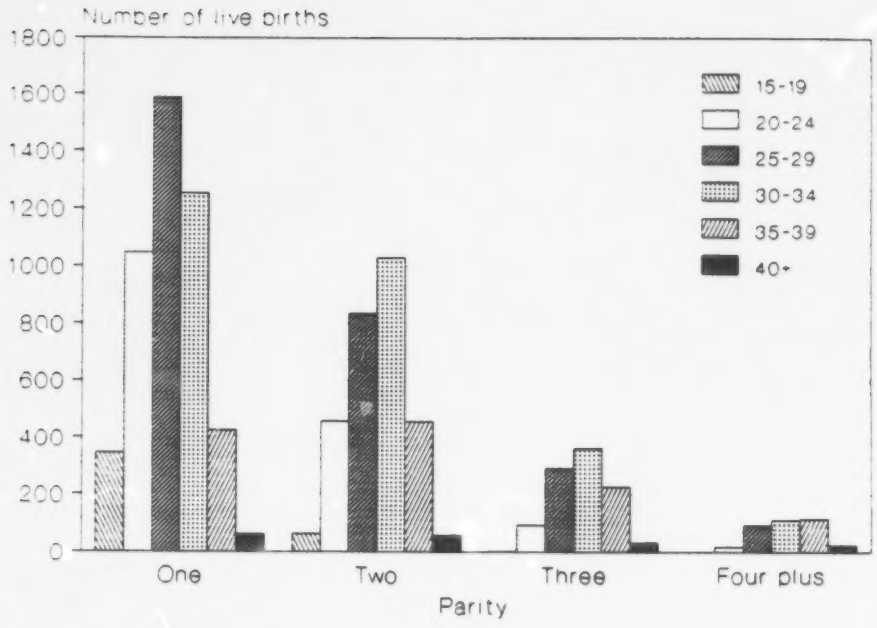


Figure 6.3 Parity, City of Toronto Women who gave Birth in 1988

Parity refers to the number of live births a woman has experienced. There were 8,995 babies born to women residing in the City of Toronto in 1988. Among these births, 52.5 percent were to women who were para-1, 32.2 percent para-2, 11.2 percent para-3, 2.9 percent para-4, and 1.2 percent para-5. The average parity was 1.68.

Figure 6.3 shows the relationship between maternal age and parity. In 1988, the mean maternal age of para-1, para-2, para-3, para-4 and para-5 mothers was 27.4 , 30.4, 31.3, and 32.3 and 32.9 years, respectively. Tables 6.3a and 6.3b in Appendix B provide more detail.

The average parity has decreased from 1.74 in 1979 to 1.68 in 1988 and the average maternal age of para-1 mothers has increased in stepwise fashion from 25.4 to 27.4 during the same period. The mean maternal age for para-2, para-3, para-4 and para-5 groups has increased in similar fashion.

6.4 BIRTH PLACE OF MOTHERS

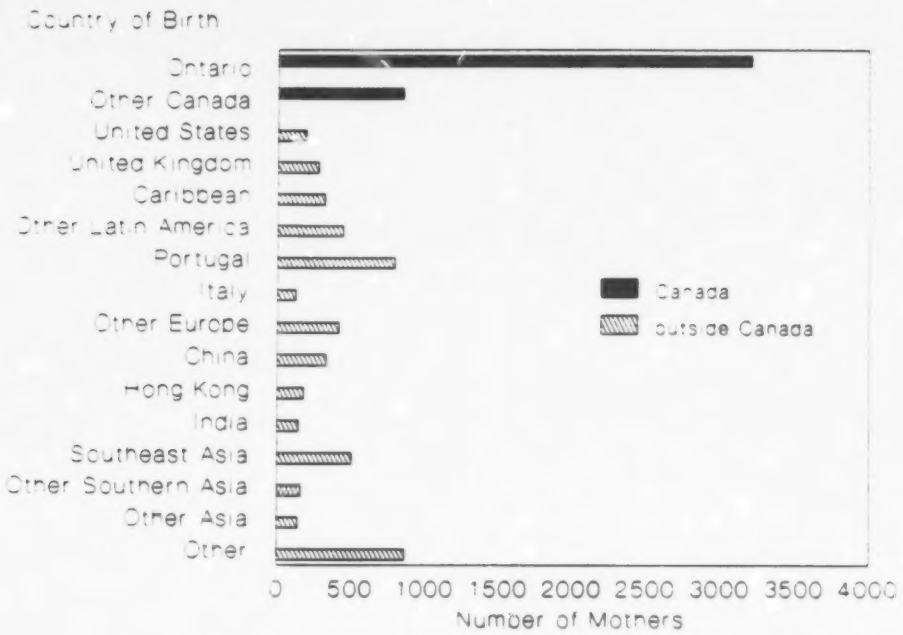


Figure 6.4 Birth Place of Mothers, City of Toronto 1988

More than half of the women who gave birth in the City of Toronto in 1988 were themselves born outside of Canada. Figure 6.4 shows the major places of origin.

Women born in Portugal contributed nine percent of the 1988 total of 8,995 births. Women from the Caribbean and from other places in Latin American contributed a total of 8.6 percent. Asian women contributed 16.3 percent of the City's births, including 5.6 percent to women from the countries of Southeast Asia.

Among City of Toronto women who gave birth in 1988 and whose own place of origin was in Canada, four-fifths were born in Ontario. Another 8.4 percent were born in Quebec, 7.4 percent were born in the west and five percent were born in the Atlantic provinces.

The average (mean) maternal age of mothers born outside Canada was slightly lower than the average for women born inside Canada: 28.2 compared with 29.0. Tables 6.4a and 6.4b in Appendix B provide details for Figure 6.4 above.

6.5 LOW BIRTH WEIGHT

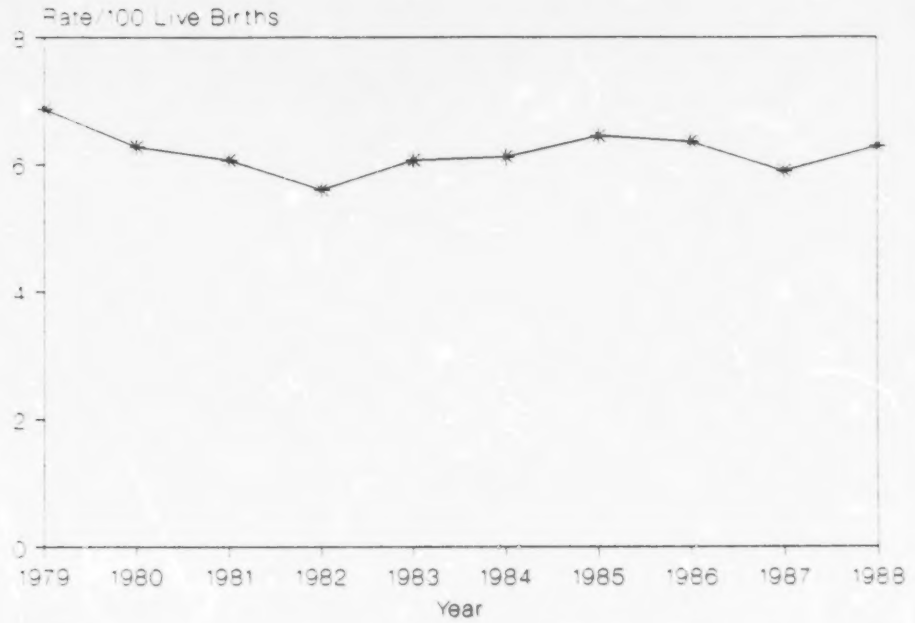


Figure 6.5 Low Birth Weight Rate, City of Toronto 1979-1988

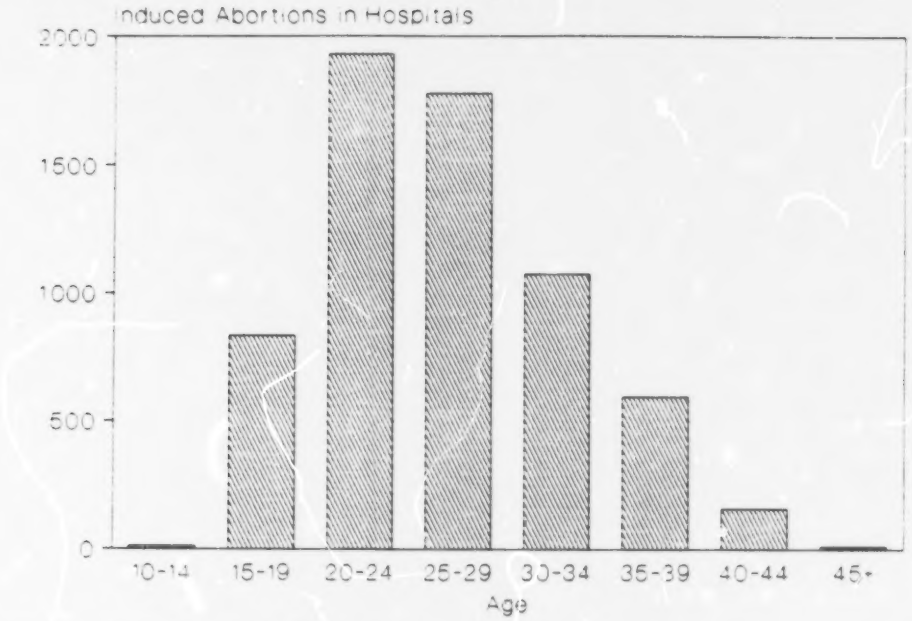
Low birth weight rate (LBWR) refers to the percentage of infants born weighing less than 2500 grams. The rate is recommended by the World Health Organization as an effective indicator of the nutritional status of infants.

Figure 6.5 shows that the LBWR in the City of Toronto varied between 5.6 percent and 6.9 percent during the past decade; it did not follow any uniform upward or downward trend. In 1988, the LBWR was 6.3 percent compared with 5.9 percent in the preceding year.

Nearly one in five cases fell into the very low birth weight category (infants with a birth weight less than 1500 grams). These infants form a high risk group for early neonatal death and require special care after birth.

Table 6.5 in Appendix B provides more details.

6.6 INDUCED ABORTION



Source: Ontario Ministry of Health

Figure 6.6 Number of Induced Abortions by Age, City of Toronto (Hospitals Only), 1988

In 1988, a total of 6,399 induced abortions were performed in Ontario hospitals for residents of the City of Toronto, according to data supplied by the Ministry of Health. This was a decrease of 2.6 percent from 1987. As Figure 6.6 shows, women aged 20-24 remained the largest age category at 30.2 percent.

Since 1983, free-standing clinics in the City of Toronto have been providing an increasing proportion of abortion services. In 1988, a total of 6,786 abortions were performed in three clinics. This was an increase of 33.1 percent over 1987. These clinics accounted for 19 percent of the abortions performed in Ontario in 1988. While the clinics are located in the City, complete data on their clients' place of residence is not yet available.

The Ministry of Health only records information for induced abortions performed in Ontario hospitals. Clinic figures are not included in the Ministry data shown in Figure 6.6. Abortions performed for City of Toronto women outside of the Province of Ontario also are not shown. In addition, it is recognized that approximately 10 to 15 percent of the abortions assigned to the City of Toronto actually were performed for residents of other municipalities in Metropolitan Toronto. Interpretation of the data shown in Figure 6.6 (and Table 6.6 in Appendix B) must take these factors into consideration.

Chapter Seven
Morbidity

7.1 INTRODUCTION AND SUMMARY

Health status refers to the level of healthfulness of a population. There is, however, no widely accepted, standard method of quantifying this concept. One alternative is to take certain dimensions of ill health which can be measured and use them to describe the health status of a population. Morbidity measures are one such approach.

Morbidity refers to the level and frequency of disease, the manifestations of which extend over a period of time. The first event is the onset of a symptom or some other indication of illness; the frequency of its appearance in a population is its incidence. The total number of illnesses observed in a population at a given moment is the point prevalence.

Of the major sexually transmitted diseases (STD) reported in the City, infectious syphilis and gonorrhea generally declined during the last decade, whereas latent syphilis penicillinase producing neisseria gonorrhea(PPNG), and chlamydia did not. The notification rates of new latent syphilis fluctuated with peaks recorded in 1980, 1984, and 1987 and troughs in 1982, 1986, and 1988. The number of cases of PPNG has been increasing since 1984, with a peak of 52 cases in 1988. The number of chlamydia cases among females has followed an increasing trend since 1985, with a record high of 1,302 cases in 1988.

The number of Hepatitis A cases has steadily increased during the last six years. Conversely, the number of Hepatitis B cases followed a decreasing trend during the same period. Tuberculosis cases also declined slowly with some fluctuations during the last decade, while that of re-activated cases did not.

In 1988, 6.8 percent of the total hospital discharges residing in the City were patients suffering from accidents, poisonings and injuries. About one-eighth of these were children aged 14 and under.

The major diagnostic groups of male and female inpatients in the City were not the same. For the males, the top six groupings, in descending order, were: circulatory, digestive, respiratory, accidents (including poisonings and injuries), neoplasms, and genitourinary. For females, these were complicated pregnancy, genitourinary, circulatory, neoplasms, digestive, and respiratory.

7.2 INCIDENCE AND TRENDS IN SEXUALLY TRANSMITTED DISEASE(STD)

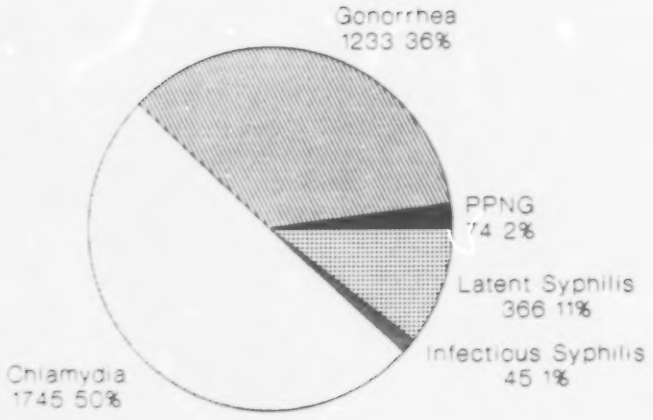


Figure 7.2 Sexually Transmitted Disease, City of Toronto, 1988

Syphilis, gonorrhea, and chlamydia are the three major STDs reported in the City of Toronto. In 1988, chlamydia accounted for 50 percent of the total notifications of STD in the City. The second most widely occurring sexually transmitted disease was gonorrhea, comprising 36 percent of total reports, followed by latent syphilis (11 percent), PPNG (2 percent), and infectious syphilis (1 percent). A similar distribution was observed in 1987. Annual age and sex specific STD rates and sex specific counts for the period 1979-1988 are presented in Tables 7.2a and 7.2b of Appendix B.

7.2.1 CHLAMYDIA

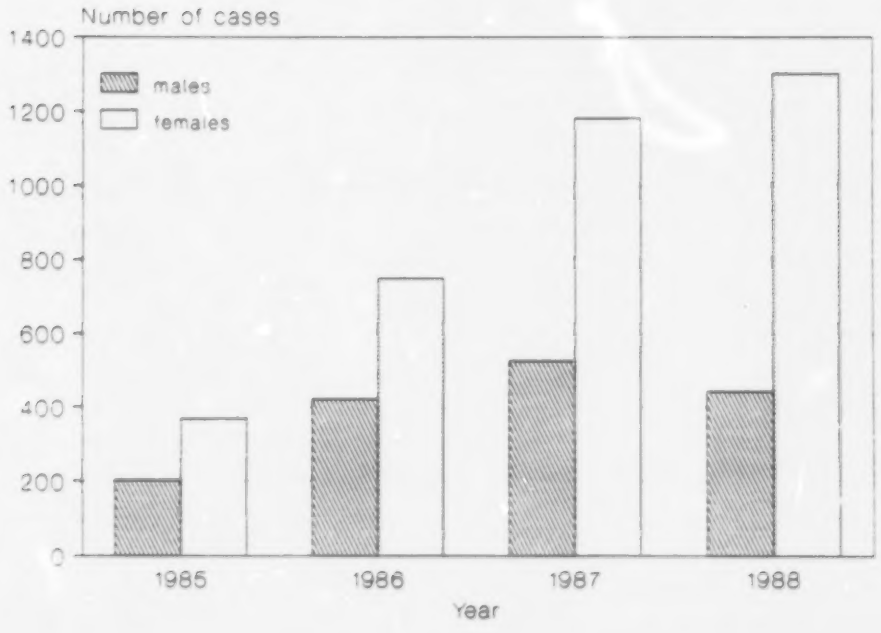


Figure 7.2.1 Chlamydia, City of Toronto, 1985-1988

Information on chlamydia has been collected since 1985. The number of reported cases among females has followed an increasing trend since that time. In 1985, 370 chlamydia cases were reported. The corresponding totals in the subsequent three years were 749, 1182, and 1302 cases. The number of cases among females has been consistently higher than that among males. This is at least partially due to the fact that women are now routinely tested for chlamydia in birth control and STD clinics, while men are not. The steady increase in chlamydia noted for women has not been seen in the male population.

7.2.2 INFECTIOUS SYPHILIS

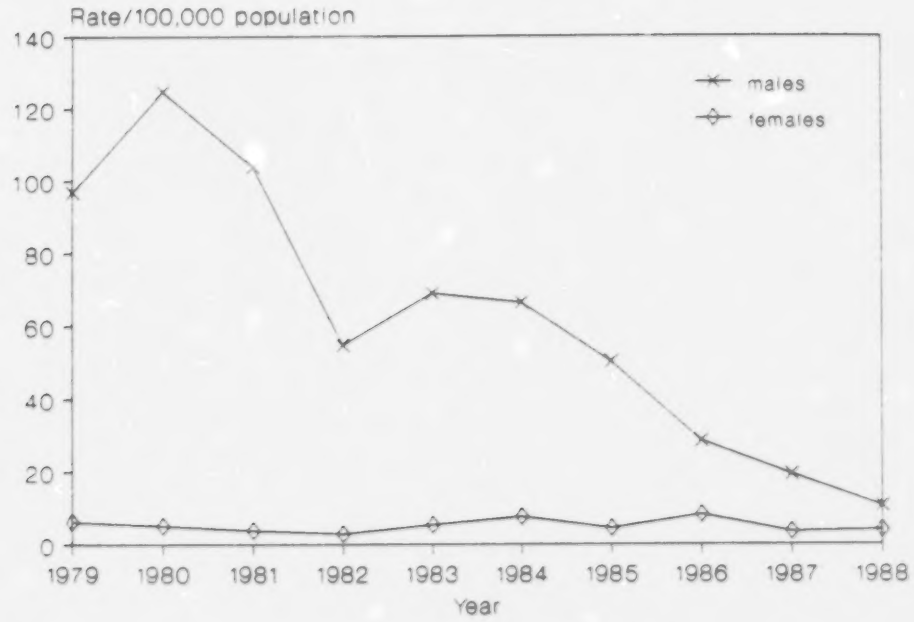


Figure 7.2.2 Infectious Syphilis, City of Toronto, 1979-1988

During the past decade, the number of cases as well as the incidence rate of infectious syphilis has dramatically decreased among males in Toronto. In 1980, 361 cases of infectious syphilis were reported for this population, compared to just 32 cases in 1988. The corresponding incidence rates (per 100,000 population) were 124.8, and 10.8. This trend is illustrated above in Figure 7.2.2. As for females, the number of infectious syphilis cases during this period has remained at less than 20 cases annually.

A breakdown of the incidence rate of infectious syphilis by sex and age shows that in 1988, the highest incidence rate for males was found in the young adult age group (20-24). This rate was 25.6, in comparison to 10.7 for all males. For females, the adolescent age group (15-19) had the highest incidence rate, that is 18.1, which compared with 4.1 for all females. This suggests that the priority target groups for STD education and prevention programmes are adolescents and young adults.

More information regarding syphilis incidence can be found in Tables 7.2a and 7.2b of Appendix B.

7.2.3 LATENT AND OTHER SYPHILIS

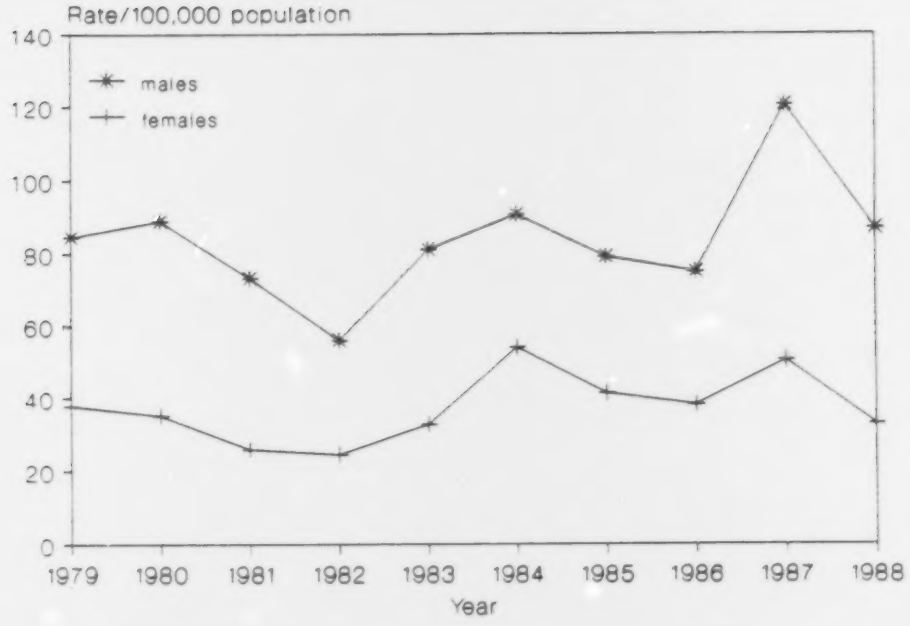


Figure 7.2.3 Latent and Other Syphilis, City of Toronto, 1979-1988

Unlike infectious syphilis cases, latent syphilis did not show a decreasing trend during the past decade. Both the number and notification rate of new latent cases fluctuated with peaks recorded in 1980, 1984, and 1987 and troughs in 1982, 1986, and 1988. The overall high of 514 cases in 1987 was due to both increased immigration and the introduction of more stringent screening procedures, believed to have resulted in a high false positive rate. This detection method was revised during the first quarter of 1988.

Other syphilis includes cardiovascular syphilis, neurosyphilis, and early and late congenital syphilis. In 1988, these types of syphilis accounted for only 2 percent of all reported cases.

7.2.4 GONORRHEA

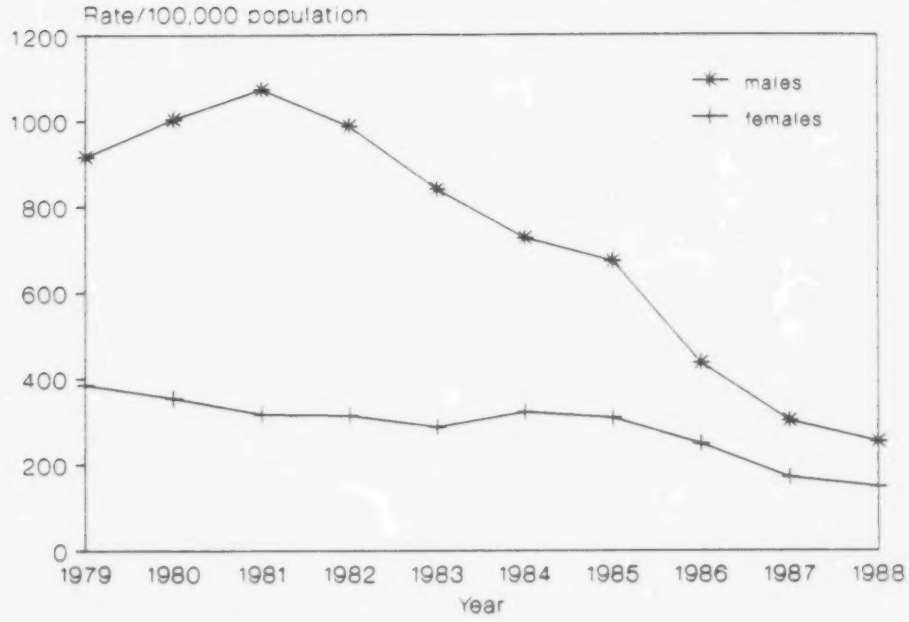


Figure 7.2.4 Gonorrhea, City of Toronto, 1979-1988

The number of cases as well as the incidence rate of gonorrhea (excluding PPNG) in the City of Toronto declined steadily during the last decade. Among male residents the number of cases reported was 2641 in 1979 compared to 761 in 1988; the corresponding figures for females were 1181 and 472 cases. In terms of incidence rates, that for males dropped from 916.9 in 1979 to 253.8 in 1988 with a drop from 385.1 to 148.5 for females during the same period.
The incidence rate of gonorrhea (excluding PPNG) is illustrated in Figure 7.2.5. These rates varied among different age groups. For the males, the highest rate in both 1987 and 1988 was observed in the young adult age group (20-24); for females, the adolescent age group (15-19) experienced peak incidence. The lowest incidence rate was detected in the adult to elderly age group (30 years and over) for both sexes.

Again, Tables 7.2a and 7.2b of Appendix B contain more complete incidence data.

7.2.5 PENICILLINASE PRODUCING NEISSERIA GONORRHEA (PPNG)

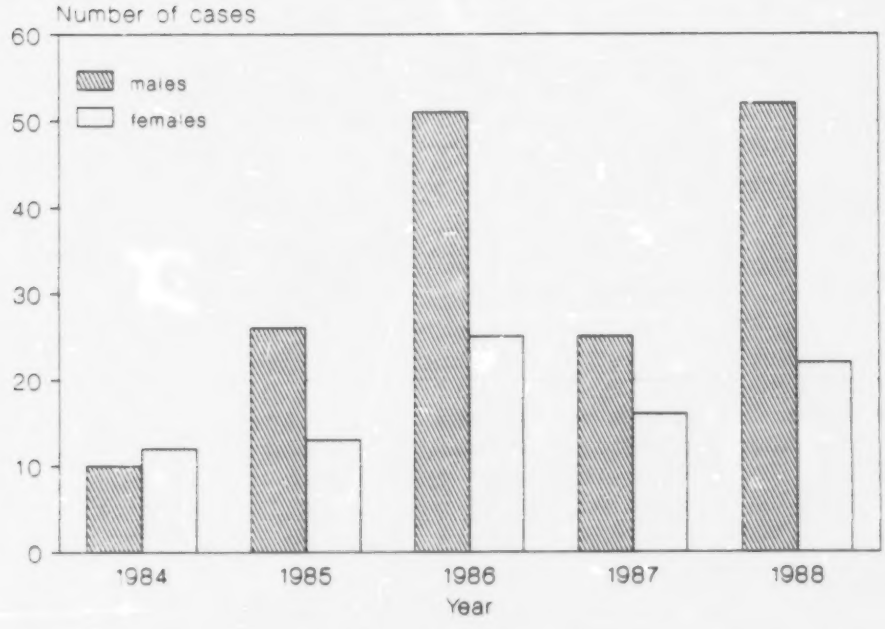


Figure 7.2.5 PPNG, City of Toronto, 1984-1988

PPNG is a penicillin resistant strain of gonorrhea. The number of reported PPNG cases for the period 1982 through 1988 is presented in Figure 7.2.5. It should be noted that although gonorrhea incidence as a whole has decreased over the past decade the number of PPNG cases among them has been increasing since 1984, the year when the reporting pattern of PPNG became stable. The 1988 figures showed an increase of 81 percent over the previous year. During this time, other gonorrhea cases dropped by 15 percent, resulting in a dramatic increase in the percent of gonorrhea cases that were PPNG; from 3 percent during the fourth quarter of 1987 to 11 percent during the final quarter of 1988.

7.3 AIDS AND HIV INFECTION

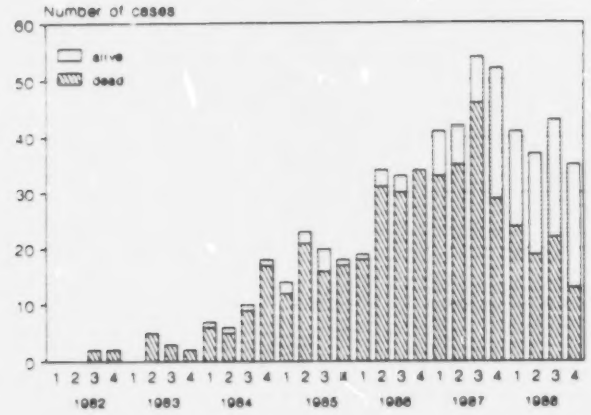


Figure 7.3.1 AIDS, City of Toronto, 1982-1988

7.3.1 AIDS

AIDS emerged as a public health problem in Canada during the early 1980s. For the past ten years, Canadians have had to face the threat and the reality of AIDS. In the City of Toronto, the first four AIDs case were diagnosed in the third quarter of 1982. The number of newly diagnosed cases increased to 10 in 1983, 41 in 1984, 75 in 1985, 120 in 1986, and 189 in 1987. This number dropped to 156 in 1988. Although the number of AIDS cases appeared on an upward trend between 1982 and 1987, the annual percent increase of cases has been consistently dropping since 1984. Quarterly monitoring indicates a linear growth in cases (that is, constant arrival rates) since 1987.

The total number of AIDS cases in Toronto through December of 1988 was 515; all but two of these were males. Ninety-five percent of those suffering from AIDS were between 20 to 54 years of age at the time of diagnosis. As of the end of December of 1988, sixty-four percent of these individuals were known to be deceased, including all of those diagnosed prior to 1984.

In terms of risk factors, the overwhelming majority (95.7 percent) of the AIDS cases in the City were males involved in homosexual or bisexual practices. An additional 4.0 percent of AIDS patients used injection drugs while 3.3 percent had received blood or blood products. Less frequently recorded risk factors included those with a high risk sexual partner (1 percent) and one case of perinatal transmission. In six cases no risk factor was identified.

More detailed age and sex breakdowns are found in Appendix B Table 7.3.1.

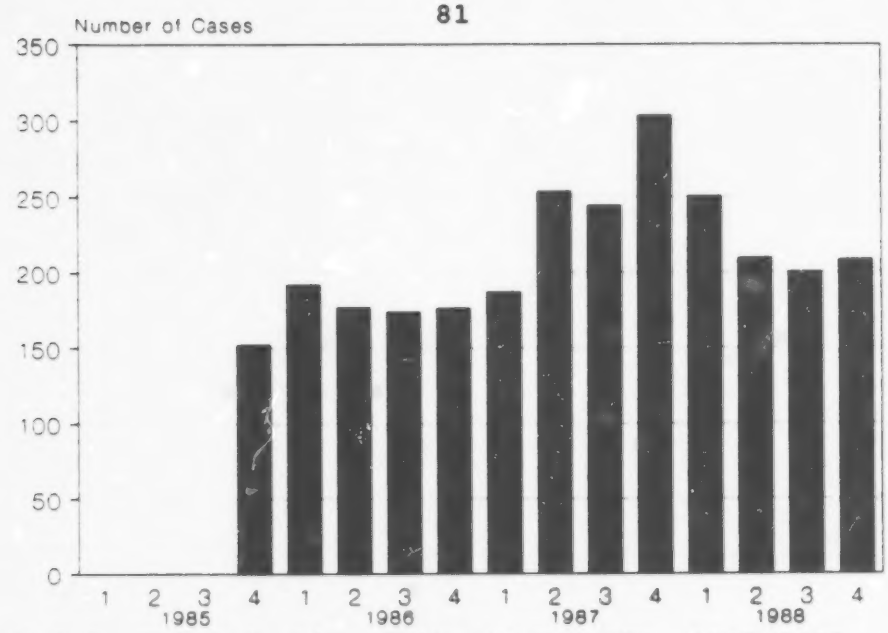


Figure 7.3.2 HIV Infection, City of Toronto, 1985-1989

7.3.2 Human Immunodeficiency Virus (HIV)

Data on HIV antibody tests have been collected in the City since November of 1985. The trend in the numbers of positive tests is represented in Figure 7.3.2. In 1985 there were 152 such positive determinations, followed by increasing numbers for 1986 and 1987. A drop of 12 percent was observed in 1988. Up to the end of December 1988, the cumulative total was 2,572. The trend in HIV antibody positives is similar to that illustrated in Figure 7.3.1 for AIDS cases of the same period.

Of the 2,572 persons testing HIV antibody positive, 2502 (97.3 percent) were male. Paediatric cases accounted for 1.6 percent of the total. The age groups with highest prevalence were those for 25-29 year olds and those 30-34, each accounting for more than 21% of the total positive results.

Risk factors of those who are HIV antibody positive are similar to those in AIDS cases. Of the 2,572 adult cases, 2,299 (89.4 percent) were involved with homosexual or bisexual practice, 135 (5.2 percent) with injection drug use, 128 (5.0 percent) with receipt of blood or blood products, 68 (2.6 percent) with high risk sexual partners, and 46 (1.8 percent) with no identified factors. Of the 41 paediatric cases, 10 (24.4 percent) were perinatal transmissions and the remaining 31 (75.6 percent) were recipients of blood or blood products.

Age, sex and risk factor data are summarized in Tables 7.3.2a and 7.3.2b of Appendix B.

7.4 INCIDENCE AND TRENDS IN HEPATITIS

While the number of Hepatitis A cases reported for both 1987 and 1988 was 68, these totals represented a dramatic increase over those of the previous four years, when the annual numbers of cases remained below 40. This increase may be linked to the increase in hepatitis A among illicit drug users, including those who smoke or inject drugs, which as been reported in several jurisdictions in the United States, Canada, and the Scandinavian countries.[1] Hepatitis A is an enteric disease, most frequently acquired through oral ingestion of the virus. Transmission among illicit drug users may be linked to contaminated drugs or poor hygiene. While handling these drugs, users may contaminate their hands with the hepatitis A virus, facilitating hand-to-mouth disease transmission. A general level of poor hygiene among this group may also contribute to the spread of Hepatitis A. Two recent outbreaks of hepatitis A in Canada have been among this group.

Conversely, the numbers of Hepatitis B cases recorded in 1987 and 1988 showed a drop from the 1983 to 1986 period. In 1988, the number of reported cases was 92, compared to 128 in 1985 and 145 in 1983. This drop may be related to both an increase in safer sex practices as well as the distribution of hepatitis B vaccine to others at increased risk.

The number of non-A and non-B hepatitis cases remained very small; there were 4 cases in 1987 and 9 cases in 1988.

Males outnumbered females in both hepatitis A and hepatitis B cases. Of the 68 hepatitis A cases in 1988, 60 percent were males; similarly, males accounted for 90 percent of the 92 hepatitis B cases. In terms of age, the 20-29 year old age group comprised the largest proportion of both hepatitis A and hepatitis B cases.

Table 7.4 in Appendix B contains further details.

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[1]Harkess, John, et. al., "Outbreaks of Hepatitis A among Illicit Drug Users, Oklahoma, 1984-87," American Journal of Public Health, v. 79, no. 4, April, 1989.

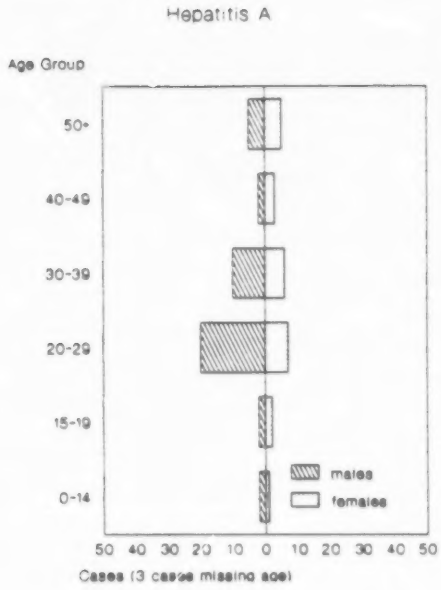


Figure 7.4a Hepatitis A, By Sex & Age, City of Toronto, 1988

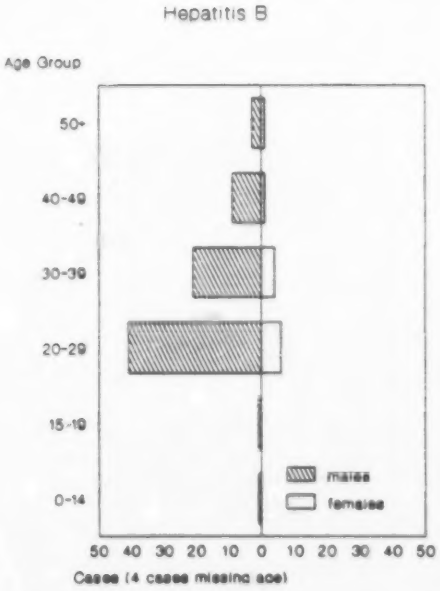


Figure 7.4b Hepatitis B, By Sex & Age, City of Toronto, 1988

7.5 INCIDENCE AND TRENDS IN TUBERCULOSIS

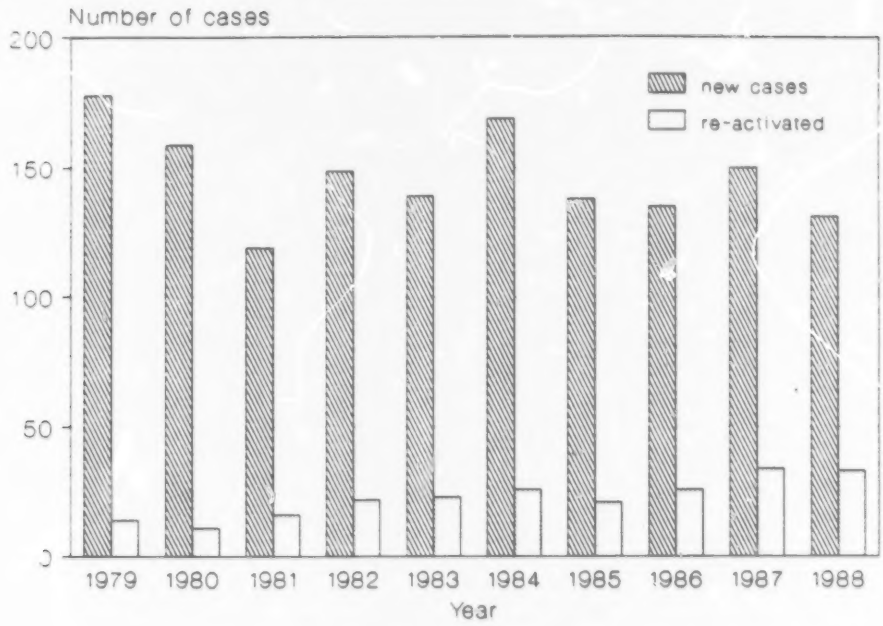


Figure 7.5 Tuberculosis, New and Re-Activated, City of Toronto, 1979-1988

During the 1982 to 1988 period, the number of new tuberculosis cases in Toronto fluctuated between 130 to 170 per year. The number of reactive cases remained quite stable at less than 40 cases annually.

More males than females were found among the TB cases in 1988. Of the 169 cases, approximately 70 percent were males.

A further breakdown of the TB cases and notification rates shows that among males, generally older age groups had higher notification rates than younger. The one exception here occurred in the 25-34 age group which had an unexpectedly higher notification rate than those aged 35-54. A different pattern is found among the females where the notification rates of all age groups were generally uniform.

Of the 131 newly reported TB cases during 1988, 35 (27 percent) were born in Canada. Year of arrival in Canada is available for 90 of the 93 remaining cases. Of these, 51 percent were new arrivals who had entered the country between 1985-1988, 18 percent had immigrated between 1980-1984, 11 percent between 1970-1979, and 20 percent before 1970. The annual numbers of new and reactive TB cases since 1982 can be found in Appendix B Table 7.5.

7.6 POISONING AND INJURY

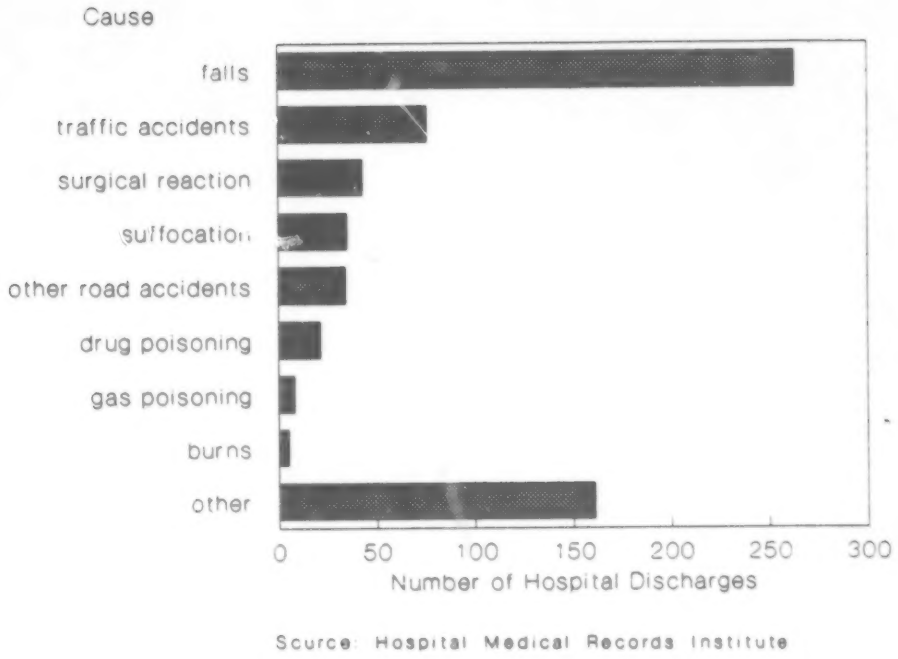


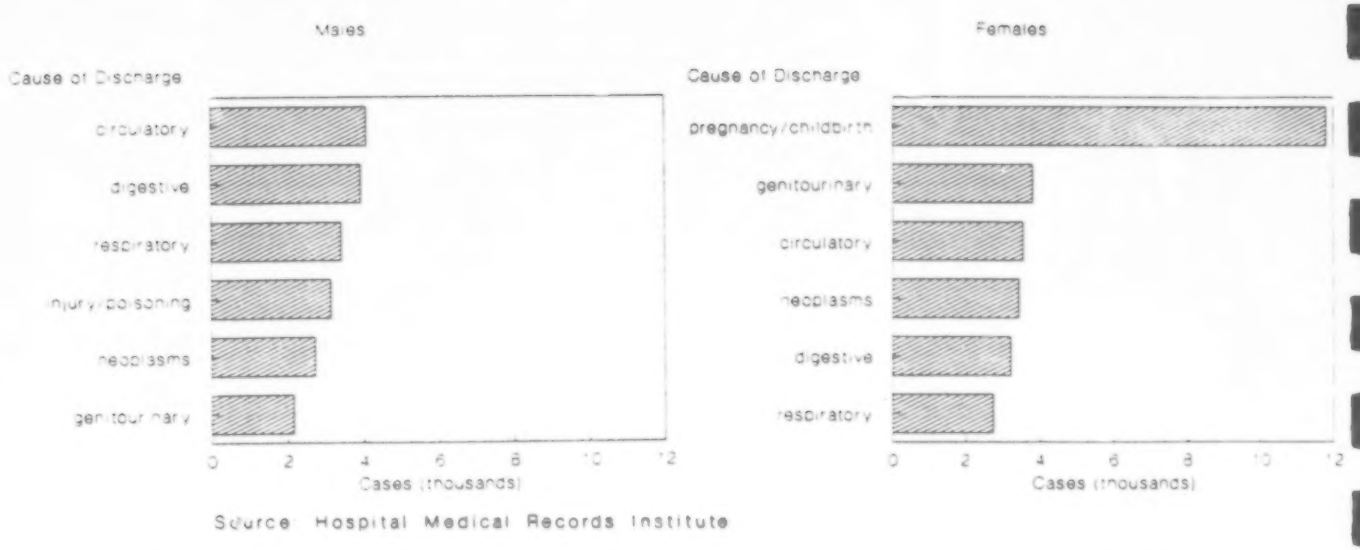
Figure 7.6 Number of Children Discharged from Hospital By Type of Accident and Poisoning, City of Toronto, 1988

In 1988, the total number of City residents discharged from hospitals was 80,302. Of these, 5,499 (6.8 percent) had suffered from poisonings or injuries.

Injuries were far more common than poisonings, accounting for over 98 percent of these 5499 discharges. Injuries to children made up 12 percent of this group. The most common causes included falls (40.7 percent of 646), motor vehicle traffic accidents (11.8 percent), suffocation (5.4 percent), and other road vehicle accidents, including bicycles (5.0 percent). This breakdown is similar to that observed for the older age groups.

Accidental poisonings included those due to drugs, medications, biological, solid and liquid substances, and gases and vapours. Of the 71 discharges due to poisoning, 41 percent (29) were children aged 14 and under, most of whom had accidentally ingested drugs or medications.

7.7 HOSPITAL MORBIDITY



Source: Hospital Medical Records Institute

Figure 7.7 Leading Causes of Hospital Discharge by Sex, 1988

The major diagnostic groups assigned to the 80,302 discharges from hospitals in 1987-88 were, in order of frequency, complicated pregnancy (14.7 percent), circulatory diseases (9.5 percent), digestive diseases (8.9 percent), neoplasms (7.7 percent), respiratory diseases (7.7 percent), genitourinary diseases (7.4 percent), and accidents, poisoning and injuries (6.8 percent).

As would be expected, the pattern of diagnosis among male inpatients differed from that among females. For the females discharged from hospital during this period, complications of pregnancy accounted for 25.1 percent of the 46,937 discharges. These were followed by genitourinary problems (8.1 percent), circulatory problems (7.6 percent), neoplasms (7.3 percent), digestive disorders(6.8 percent), and respiratory difficulties (5.9 percent). For the 33,343 hospitalized males, circulatory problems (12.3 percent) were the most frequently seen. Next most common were digestive troubles (11.8 percent), followed by respiratory difficulties (10.2 percent), accidents, poisonings, and injuries (9.4 percent), neoplasms (8.2 percent), and genitourinary complaints (6.4 percent).

The pattern of diagnosis also varied with age of inpatients. For the group under 15 years of age, the top six diagnostic groups were, in descending order:
- conditions originating in the perinatal stage (24.9 percent),
- respiratory difficulties (14.7 percent)
- accidents, poisoning and injuries (4.8 percent)
- congenital anomalies (4.2 percent)
- digestive troubles (3.1 percent)
- symptoms not clearly specified (3.0 percent)

Both boys and girls had the same pattern and order of diagnosis.

For the 15-54 age group, the diagnostic pattern was different. The top six groups were:
- complicated pregnancy (31.4 percent)
- genitourinary difficulty (9.3 percent)
- digestive trouble (9.1 percent)
- mental disorders (7.8 percent)
- accidents, poisoning and injuries (7.6 percent)
- neoplasms (5.5 percent)

Male and female inpatients had different patterns; while complicated pregnancy and genitourinary are the top two diagnostic groups for the females, digestive and mental disorders were those most common for the males.

The top six diagnosis groups for the 55 and older age group were:
- circulatory troubles(20.7 percent)
- neoplasms (14.0 percent)
- digestive difficulties (11.5 percent)
- genitourinary problems (7.7 percent)
- accidents, poisoning, and injuries (7.4 percent)
- respiratory troubles (7.4 percent)

Both male and female inpatients in this age group had the same diagnostic pattern and order.

More details concerning hospital discharges are presented in Tables 7.7a and 7.7b of the Appendix.

Chapter Eight
Mortality

8.1 INTRODUCTION AND SUMMARY

Mortality is one of the three health dimensions chosen to reflect the health status of residents of the City of Toronto. For the purpose of mortality statistics, the death of each Toronto resident is attributed to one underlying cause, based upon information reported on the death certificate. Classification of these conditions is based upon the International Classification of Diseases (9th revision).

During the last decade, the stillbirth ratio fluctuated between a low of 5.9 stillbirths per 1000 live births in 1987, to a high of 9.5 in 1983. These variations did not appear to follow a definite trend. During this same period, perinatal mortality decreased. The rates recorded during the past four years are the lowest of the decade. While both the stillbirth and perinatal mortality ratios have been maintained at low levels, we must continue to strive for further reduction.

The rates measuring both infant and neonatal mortality have in general followed decreasing trends, although with some fluctuations during the last decade. However, the comparison of these rates with those of other Canadian cities indicates that the Toronto figures are relatively high.

The directly standardized mortality rate (DSMR) for almost all causes of death have generally remained stable since 1980. Two exceptions to this are neoplasms which are following a slightly increasing trend and circulatory disease which is decreasing.

The major causes of death for male and female residents were similar; myocardial infarction and ischemic heart disease and lung cancer were those most frequently cited in 1988.

On the list of potential years of life lost, neoplasms ranked first, followed by accidents, poisoning and injuries, circulatory diseases, and infectious diseases. AIDS is included in this latter group of infectious diseases, which jumped from the eleventh position in 1981 to the fourth in 1988.

Some Census Tracts in the City had higher directly standardized death rates than the others. These tracts, although scattered throughout the four Health Areas, predominate in the south and central parts of the City.

Compared to the population of Ontario, the male residents of the City had a slightly higher-than-expected mortality experience, while the females enjoyed a lower one. The standardized mortality ratio of digestive diseases, neoplasms, and accidents and injury for Torontonians are greater than 1 (i.e. observed deaths are more than expected deaths) as compared to all of Ontario.

8.2 STILLBIRTH RATIO

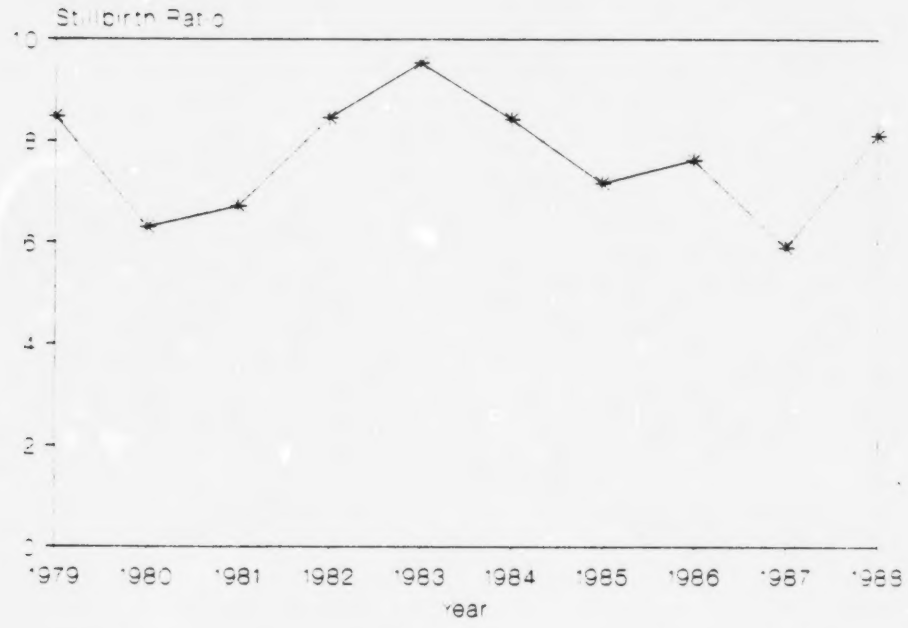


Figure 8.2 Stillbirth Ratio, City of Toronto, 1979-1988

A stillbirth is defined as a fetal death occurring after twenty weeks of gestation. The stillbirth ratio is the number of stillbirths per 1,000 births for a given year. The number of stillbirths in the City of Toronto fluctuated between 51 to 77 per year during the last decade. As shown in Figure 8.2, there was no observable trend in the stillbirth ratio for the past decade.

Of the 73 stillbirths recorded in 1988, 33 (45 percent) had achieved a gestational age of between 20 to 27 weeks, while the remaining 40 (55 percent) had a gestational age of 28 weeks or more.

The stillbirth data represented in Figure 8.2 can be found in Table 8.2 of Appendix B.

8.3 INFANT MORTALITY RATE AND NEONATAL MORTALITY RATE

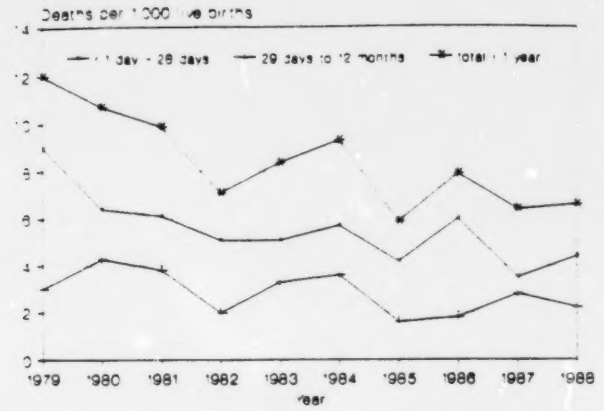


Figure 8.3 Infant Mortality Rates by Age, City of Toronto, 1979-1988

The infant mortality rate (IMR) is the number of deaths of children under one year of age per 1,000 live births of the same year. Since 1979, the IMR of the City has followed a decreasing trend. In 1988, the IMR of the City of Toronto was 6.6 which compared to 12.0 in 1979. However, it is noted that the decline of IMR is not uniform; it has shown some fluctuations during the last ten years.

The neonatal mortality rate (NMR) refers to the number of deaths of infants under 29 days of age per 1,000 live births in a given year. As shown above, the neonatal mortality rate has also generally decreased during the past decade. The highest rate observed during this period was the 1979 rate of 8.0, while the low of 3.5 was recorded in 1987. A further breakdown of the neonatal infant deaths showed that the majority of these deaths occurred in the early neonatal stage, that is, during the first seven days of life. For example, of the 39 neonatal deaths occurring in 1988, 32 (82 percent) were in this early stage.

A comparison of both the IMR and NMR for Toronto and other Canadian cities is available for the census year 1986. Both of these rates were higher in the City of Toronto than those of the surrounding cities of East York, Etobicoke, North York, Scarborough, and York. These differences may be due to age and socio-economic differences between the maternal population of Toronto and these neighbouring cities. Further comparison of Toronto with ten other major cities in Canada reveals that only four of these had a higher IMR than Toronto. Furthermore, Toronto's 1986 NMR of 6.97 was exceeded only by Ottawa and Vancouver. Again, age and socio-economic factors are likely to be associated with these differences.

Details can be found in Tables 8.3 and 8.4b of Appendix B.

8.4 PERINATAL MORTALITY RATE

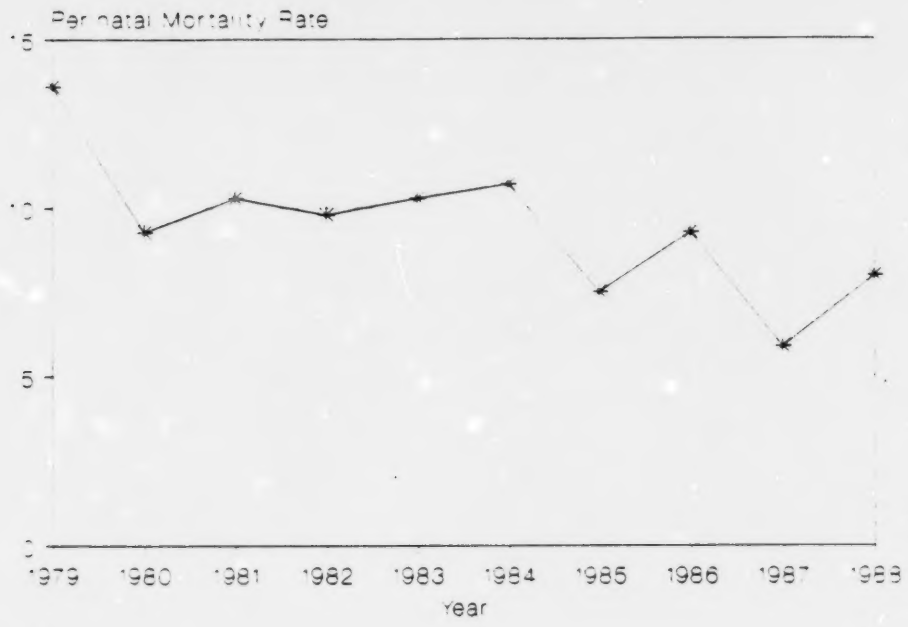


Figure 8.4 Perinatal Mortality, City of Toronto, 1979-1988

The perinatal mortality rate refers to the sum of late foetal deaths (gestation age is 28 weeks or more) and early neonatal deaths per 1,000 live births and late foetal deaths of the same year.

The number of perinatal deaths in the City of Toronto followed a slightly decreasing trend with some fluctuations within the range of 52 and 108 during the last decade. In 1988 the perinatal death rate was 8.0; this compared to 5.9 in 1987, 7.5 in 1985, 10.3 in 1981, and 13.6 in 1979. Table 8.4 in Appendix B shows more details.

Again using figures from the 1986 census, we find the perinatal mortality rate to be higher in the City of Toronto than that of any of the surrounding cities in Metropolitan Toronto. Moreover, as shown in Tables 8.4a and 8.4b of Appendix b, this rate was higher than that observed in any of the other major Canadian cities.

8.5 DIRECTLY STANDARDIZED MORTALITY RATE

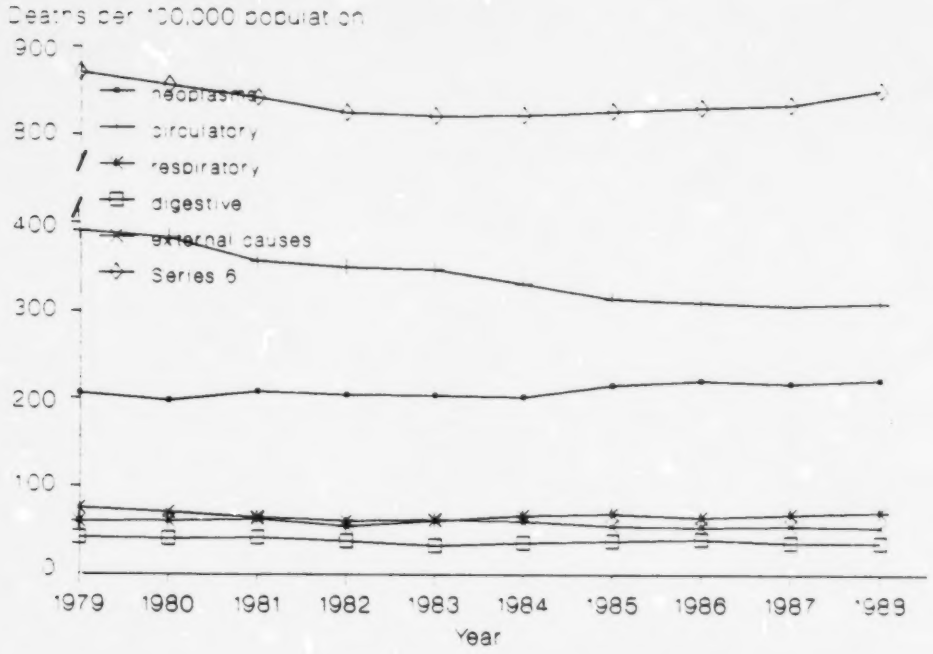


Figure 8.5 Directly Standardized Mortality Rates, All Causes and Individual Disease Categories, City of Toronto, 1979-1988

The Directly Standardized Mortality Rate (DSMR) represents the number of deaths per 100,000 population for a given year. For the past decade, the DSMR for the City of Toronto has remained stable, ranging between 821 in 1983 and 870 in 1979. The 1988 DSMR was 849.5.

The decreasing trend of the DSMR could not be maintained after 1983, mainly because the increase in the number of deaths due to cancer and respiratory disease outweighed decreases in those caused by circulatory diseases, digestive diseases, and external conditions. In fact, the DSMR has gradually increased each year since 1983.

A comparison of the DSMR by major disease group suggests that neoplasms may one day replace circulatory diseases as the number one killer for residents of the City. Details are presented in Table 8.5 of Appendix B.

8.6 MAJOR CAUSES OF DEATH

For the year 1988, 5,246 deaths were recorded in the City of Toronto. Of these, 2,755 (52.5 percent) were to males and 2491 (47.5 percent) females.

The top five causes of death for the males were : myocardial infarction and ischemic heart disease (21.0 percent), carcinoma of the trachea and lung (7.8 percent), ill defined conditions (4.9 percent), AIDS and other viral diseases (4.7 percent), and pneumonia (3.8 percent).

As for the females, the top five causes were: myocardial infarction and ischemic heart disease (21.1 percent), acute cerebrovascular disease (5.8 percent), carcinoma of the trachea and lung (5.1 percent), ill defined conditions (4.8 percent), and pneumonia (4.3 percent).

The mortality pattern for males was not the same as that for females. AIDS and other viral diseases were among the top five causes of death for the males while not even in the list of top twenty among the females. Acute cerebrovascular disease ranked second among females, but was not in the top five list of the males.

The mortality pattern in 1988 was very similar to that in 1983. For males, the only difference was the inclusion of AIDS and other viral diseases in the 1988 list of top five causes of death; for females, lung cancer replaced the position of breast cancer for the first time and was among the top five causes in 1988. Tables 8.6a and 8.6b in Appendix B show more details. Leading causes of death for different age groups are shown in Table 8.6c of Appendix B.

Table 8.6d in Appendix B shows the relative contribution of selected causes of death to the total number of deaths for the years 1979-88. There has been a slight increase in neoplasms, a decrease in deaths due to diseases of the circulatory system, a slight drop in suicides and the emergence of AIDS in 1986.

8.7 DIRECTLY STANDARDIZED DEATH RATES BY CENSUS TRACT

Figure 8.7 Directly Standardized Death Rates, All Causes, Census Tracts in the Top Quintile, City of Toronto, 1988

The directly standardized death rate(DSR) can be used to compare areas of differing age composition, as it includes an age adjustment factor. Figure 8.7 uses the technique of framed rectangles to examine the DSR for the various census tracts in the City. In this chart, a rectangle has been superimposed upon those census tracts which are included in the top quintile with respect to DSR. The width of each rectangle is proportional to the square root of the population of the associated census tract, while the amount of shading is proportional to the DSR itself. Thus, both the population rate as well as the size of the population upon which the rate is based can be presented simultaneously.

It is interesting to note that there is a large cluster of high DSR census tracts in the south-central part of the Downtown Health Area. Additional census tracts in the southern sections of both the Eastern and Western Health areas form a belt-like area of high DSR along the lower section of the map. The corresponding absence of high rates in the north serves to further emphasize this pattern. Only two census tracts in the Northern Health Area experienced relatively high DSR.

8.8 POTENTIAL YEARS OF LIFE LOST

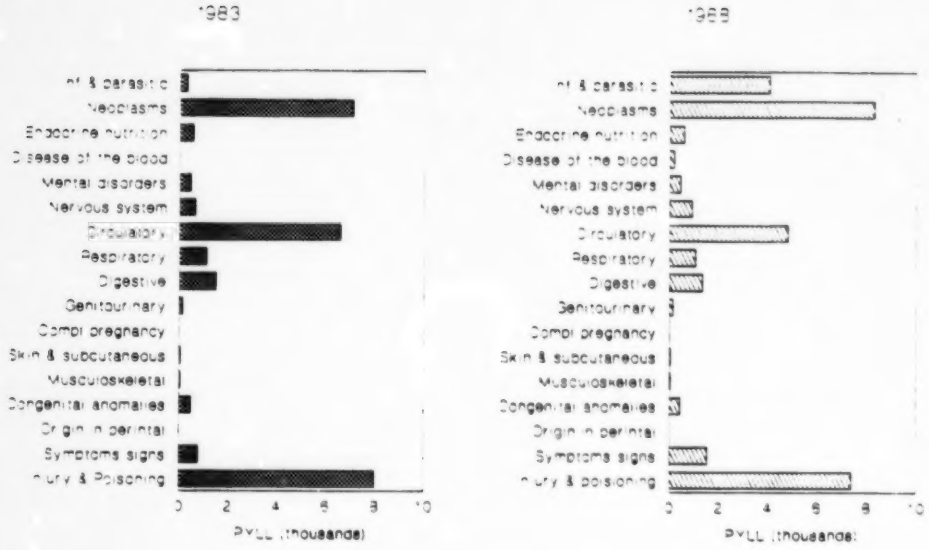


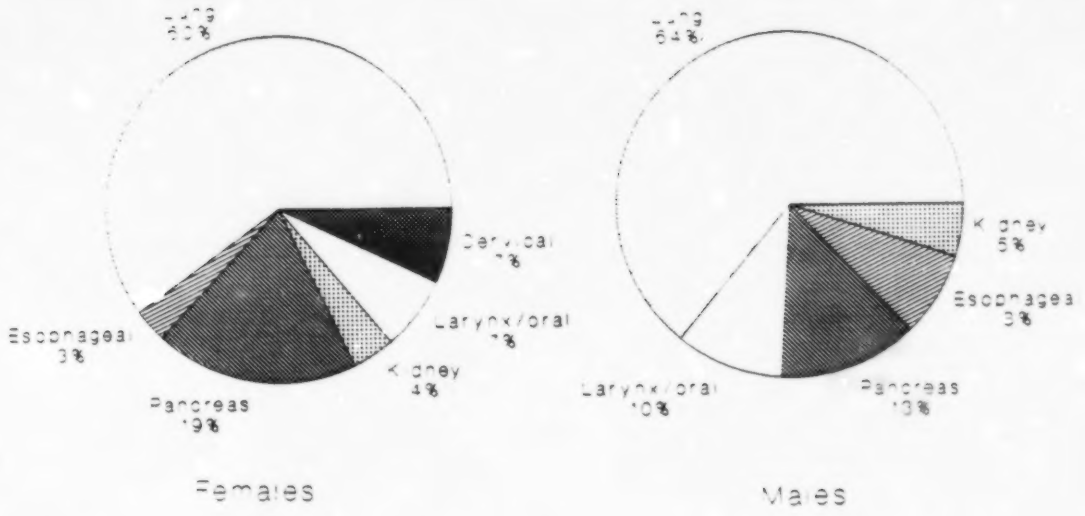
Figure 8.8 Potential Years of Life Lost, City of Toronto, 1983 and 1988

Potential years of life lost (PYLL) looks at mortality from the perspective of social cost; it estimates the number of years lost through each premature death, that is, the death of an individual under the age of 70.

In 1988, the five causes of death that accounted for the largest number of PYLL were : neoplasms (8,293 years lost); accidents, poisoning, and injuries (7,375 years); circulatory diseases (4,820 years); infectious diseases, including AIDS and other viral diseases(4,064 years); and digestive diseases (1,345 years).

Cardiovascular diseases (CVD) accounted for the majority of PYLL of circulatory diseases; it resulted in 3,205 years lost, 66 percent of the circulatory disease total. AIDS was included in the group of infectious diseases and accounted for more than 3,000 lost years. Suicide took up 2,501 (34 percent) of the PYLL caused by the accidents, poisoning and injuries. Tables 8.8a and 8.8b in Appendix B show more details.

8.9 SMOKING RELATED CANCER DEATHS



Source: Health Division, Statistics Canada, 1989

Figure 8.9 Smoking-related Cancer Deaths by Site and Sex, City of Toronto, 1986

Smoking-related cancers include cancer of the lung, larynx, oral cavity, oesophagus, bladder, pancreas, kidney, and cervix. These cancers, most notably that of the lung, have accounted for the rise in the proportion of cancer deaths during the last decade. In 1986, smoking-related cancer deaths (excluding bladder cancer because of unavailability of data) represented 49 percent and 29 percent of all male and female cancer deaths respectively.

The age-standardized mortality rate of lung cancer among male residents of the City levelled off during the 1976-79 period, but has risen again since 1983. The situation for females is even worse, as the corresponding rate for has been steadily increasing since 1979.

Table 8.9 in Appendix B presents percentage of cancers by specific sites.

8.10 STANDARDIZED MORTALITY RATIO (SMR)

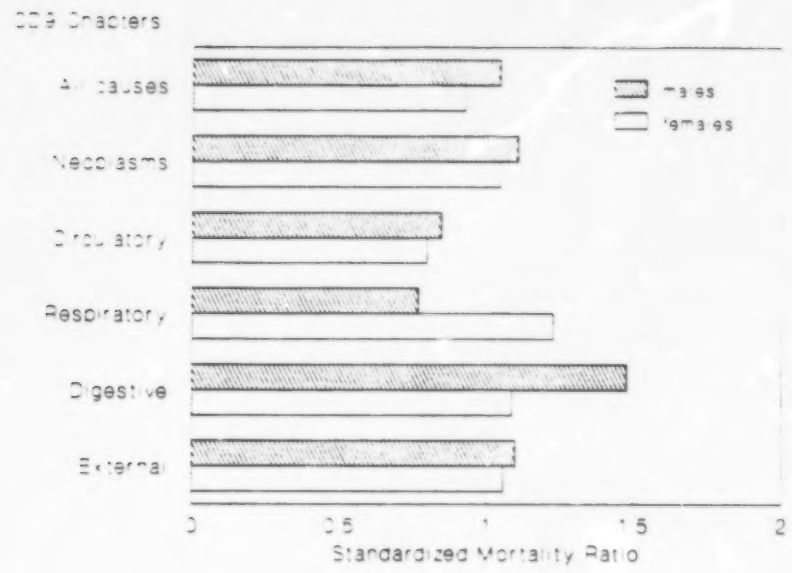


Figure 8.10 Standardized Mortality Ratio, By Sex, City of Toronto, 1988

The standardized mortality ratio (SMR) shows the ratio of the observed number of deaths of the City of Toronto to that expected, based on the mortality experience of the entire Ontario population.

The male population of the City had an SMR of 1.05 in 1988, indicating that the number of observed deaths was 5 percent higher than expected, based upon the provincial rates. Conversely, females in the City had an SMR of 0.93, suggesting that the actual number of deaths was 7 percent lower than that of expected.

A breakdown of the SMR by diseases category shows that the SMR for digestive diseases among both male and female residents of the City were higher than 1, as were those of neoplasms and external causes of death. Lower than expected death rates for both sexes were found for circulatory diseases.

Table 8.10 of Appendix B shows the 1988 SMR by age and sex for Toronto.

Chapter Nine
Conclusion

9.1 Connecting Health Status Data to the Future

Health status data tell us where we have been and where we are now. To attach meaning to this information and use it to assist in developing programs we need to connect these data to where we want to go in the future.

One of the key influences on planning for the future in the Toronto Department of Public Health has been a document and process called Healthy Toronto 2000. It has clearly established that the factors which contribute to a 'healthy city' go beyond the traditional indicators of health status to include environment, health promotion and health behaviour indicators, many of which have been presented in this report for the first time. In addition, Healthy Toronto 2000 identified several goals and priority concerns which are listed in Figure 9.1.

Figure 9.1 Goals & Priority Concerns, Healthy Toronto 2000

A. Goals:

1. Increase health expectancy among the people of Toronto.
2. Create healthful environments and protect the people of Toronto from health hazards.
3. Enable the people of Toronto to develop health promotion skills and achieve their health potential.
4. Plan for health and provide health data for the people of Toronto.
5. Promote and foster the Healthy City Initiative in all aspects of City life and government.

B. Priority Concerns

These priority concerns should be addressed by all Department programs.

1. In view of our concern with the need to reduce inequalities in health, our efforts must be to work with those with the greatest inequalities in health.
2. In view of the cultural diversity of Toronto, our efforts must be culturally appropriate and directed to those communities with the greatest inequalities.
3. In view of our concern with the need to empower people and communities, our efforts must be developed with the community, and must serve to facilitate the strengthening and empowerment of the community.

When the Department examined the above goals and concerns in context of its current programming, the health needs of Torontonians as perceived by Department staff and provincial core program requirements, it identified six priorities for 1989-90.

1. Preventing substance abuse
2. Community development and multicultural programming
3. Advocacy for the basic prerequisites to health
4. Protection from chemicals and toxics
5. Healthy parents/healthy children
6. Cancer prevention and heart health

The health status information presented in this report corroborates the choice of these priorities with one addition--healthy sexuality also emerges as a continued need for increased program emphasis. In the following section, highlights of the data are related to these program priorities.

9.2 Program Implications

Preventing substance abuse includes preventing smoking, alcohol and drug related behaviours. In the health behaviour chapter of this report, the data indicate that the percentage of smokers is still decreasing and that for Toronto the overall percentages are lower than those for Metro, the Province of Ontario and Canada as a whole. However, smoking-related cancers are on the increase in both men and women and exposure to second-hand smoke in the workplace and at home still affects many people. This suggests that the Department needs to continue emphasizing smoking prevention and cessation programs. With respect to alcohol, the data indicate that alcohol abuse or heavy drinking is still a problem for 17.3 percent of men and 7 percent of women in Toronto, and that drinking and driving continues to be a serious problem. Again, this suggests that the Department needs to emphasize alcohol use in its substance abuse prevention program. The information we have about prescription and street drug abuse is unreliable because the numbers are small, but drug related problems are well known and any worsening of the situation should be prevented.

For any of these substance abuse issues, the actual type of program that is necessary will depend on other kinds of information (i.e. what works and does not work for different ages and types of people). In particular, designing and targeting these programs must take into account factors such as age, income levels or geographic areas of the city. These related factors and data will be explored further in a "Report on Health Inequalities", to be issued in 1990.

Community development and multicultural programming by the Department will be influenced by the data on mobility and ethnicity. The knowledge that 50 percent of the population is

always moving in and out of, or around the city is a reminder that our definitions of communities and how we work with them has to recognize and accommodate this fluidity. The data on ethnicity show that Departmental programs need to be especially sensitive to Portuguese, Chinese, Italian and Greek cultural groups. The Department's prenatal programs in particular need to address the fact that more than 50 percent of births are to mothers born outside Canada especially from Portugal, Asia and Latin America.

Data related to **advocacy for the basic prerequisites to health** include family composition, access to food, housing and income. What this report tells us is that Toronto has more than double the percent of lone-parent families compared to the rest of Toronto region. The data on access to food indicate that many people in the Toronto region are short of food, especially families with children. The aggregate data presented in this report may mask some of the important differences among communities we need to appreciate in order to design appropriate programs to advocate for the basic prerequisites to health. As more information from a variety of sources becomes available, including the forthcoming Department report on health inequalities, the appropriate program responses will become clearer.

Protection from chemicals and toxics is certainly of concern to the public. As the chapter on the environment illustrates, there is much concern about air and water pollution and chemical exposure in the workplace. Many people use chemical pesticides in their homes and this presents issues for the Board and the Department as to whether or not to educate all citizens about chemical use and disposal. The data also raise questions about whether there should be a role for the Department of Public Health with respect to protection of the public from chemical exposure in the workplace. The data on perceptions about the environment are compelling, but the depth of understanding of the public about these issues is variable. The public's understanding of the environment is an area of programming interest which requires further and repeated data collection and research.

For the Department's **healthy parents/healthy children** program priority, the data on population structure indicate that the baby boom cohort is now of child bearing age. The data also indicate that pregnancy is often delayed by women in this cohort, and this will have implications for our prenatal and postnatal programs. Also, the information that 18 percent of TCHS respondents with pre-school children need child care indicates that advocacy for child care will remain an important part of this program.

Cancer, respiratory disease and heart disease are still major causes of death and illness for Torontonians. Thus, a

Departmental focus on **cancer prevention and heart health** is warranted. Several factors such as smoking and nutrition are related to both cancer and heart health, with physical fitness and alcohol consumption also being important factors in heart disease. Deaths from all cancers are increasing and lung cancer is replacing breast cancer as one of the top five killers of women. Smoking prevention targeted specifically at women must continue to be part of the Department's programs.

Although imperfect, the diet and nutritional information about Torontonians can serve as a guide for our nutrition programs, particularly as they relate to preventing cancer and heart disease. The detailed information required to target, deliver and evaluate nutrition and other programs related to heart disease and cancer prevention will come from other sources. What the data in this report indicate are the long term trends and the need to emphasize these programs for several years to come.

The information in Chapter 7 on morbidity also points to sexually transmitted diseases as important for the Department to address. Priority should be given to preventing and treating chlamydia, gonorrhoea and syphilis in adolescents and young adults. Although it has been a program priority in the past five years, AIDS has emerged as one of the top five killers of men with a significant effect on potential years of life lost. A comprehensive program addressing **healthy sexuality** would need to include a significant component addressing AIDS and other STDs as well as family planning issues.

Looking to the future requires more than health status data. Planning requires a good sense of the winds of change and emerging issues. After all, we only have data for the questions we have thought to ask in the past. Looking at the health goals and priority concerns in Figure 9.1, we can begin to determine the kinds of questions we need to ask to carry us forward. There is much information in this report to reinforce the priorities chosen by the Department in 1989 and, in fact, to suggest that these priorities will remain important for at least the next five years.

Appendix A
Sources and Limitations of Data

APPENDIX A

SOURCES AND LIMITATIONS OF DATA

POPULATION

1981 and 1986 census counts and intercensal estimates have been used as the population counts for all analyses contained in the report. In the past, population counts for inter-censal years have been taken from the Revenue Assessment rolls provided by the Metro Planning Department. These data have known undercounts in the very young and very old age groups. It was decided that a more accurate population estimate could be obtained by linear interpolation/extrapolation of the 1981 and 1986 census counts which are our best counts of the population. The method was applied at the census tract level for each sex and five year age group. Any negative counts that resulted were replaced by zeros.

The 1981 and 1986 censuses were also the sources of data on the socio-demographic composition of the population.

TORONTO COMMUNITY HEALTH SURVEY

The 1988 City of Toronto Community Health Survey studied a sample of the City's population age 15 and older. The survey instrument and methodology were modelled after that used in the 1983 City of Toronto Community Health Survey. Limitations of the 1983 data are described in the report City of Toronto Community Health Survey, 1983.

In 1988, 980 residents of the City of Toronto were randomly sampled and interviewed by telephone with a 30 minute questionnaire. The response rate was 53%. The interview included questions concerning health status, health care utilization, health behaviour, social network and support, environmental concerns and socio-demographic characteristics.

The survey does not adequately represent all segments of the Toronto population. Comparison of the socio-demographic characteristics of survey respondents with results of the 1986 Census reveals several areas of under and over representation. Under representation occurred among those with less than secondary school education, household incomes of under $10,000, non-English mother tongues, and larger household size. Those aged 15-25 or 55 and over were also under represented. Groups over represented were those with university education or greater, household income of $50,000 or more, English mother tongue and those aged 25 to 44. The sample tends to over represent the groups in society who are health care advantaged . In light of these findings, attempts to generalize the survey findings to the total City population should be done with caution.

HEALTH AND ACTIVITY LIMITATION

Data were extracted from the first draft of the report A Demographic Profile of Disabled Persons in the City of Toronto: An Analysis of The Health and Activity Limitation Survey Results produced by the City of Toronto Planning and Development Department, Research and Information Section. The analysis describes selected characteristics of the population of disabled persons as reported by the Health and Activity Limitation Survey (HALS) of Statistics Canada, conducted nationally in 1986-87.

In order to improve the statistical reliability of the results from some geographic areas Statistics Canada grouped the results for some of the municipalities. The City of Toronto was grouped with the City of York and the Borough of East York to create "Subprovincial Area 1".

The household survey results for subprovincial areas reflect those persons who responded "Yes" to a 1986 Census screening question on disability. However, it was found through a previous survey using this question that some persons with less severe disabilities would not be identified in this manner. While adjustments were made to the survey for provincial and territorial results, subprovincial area results report only on the 'more severely disabled persons' in the population (ie. those responding "Yes" to the Census question). Consequently, profiles at the subprovincial level will tend to be conservative estimates of the numbers of persons with disabilities.

CIGARETTE SMOKING

National, provincial and Metropolitan Toronto data were taken from the report Smoking Related Cancers and Smoking Behaviour in the City of Toronto, 1989 prepared by a practicum student with the Toronto Department of Public Health. The report compiled smoking data from national and provincial based surveys. These surveys have varying methodologies and response rates, therefore some caution must be exercised in interpreting trends. Sources and limitations of these data are described in Appendix A of the above cited report.

Data for the City of Toronto were based on findings of the 1983 and 1988 Toronto Community Health Surveys whose limitations are described above.

ACCESS TO FOOD

The Daily Bread Food Bank maintains records of numbers of individuals and households who are recipients of food from food pantries, soup kitchens, hostels and shelters in the Toronto Region. The recording methods used have varying degrees of accuracy so all numbers should be considered proxy measures of actual need.

In February of 1989 the Daily Bread Food Bank carried out a face to face survey of households receiving food assistance from food pantries. Respondents were selected as they entered the food pantry and at the completion of each interview the next available person was selected. Response to the survey was close to 100%. Although no formal sampling method was adopted the sample size of 1,188 and high response rate should ensure that the sample is representative of the population receiving food assistance. One area of over sampling may be among the refugee population. February of 1989 was a time of above average arrival of refugees into the City and they are at increased risk for requiring emergency food.

TRAFFIC ACCIDENTS AND CRIMINAL ACTIVITY

Annual Statistical Reports are prepared by the Metropolitan Toronto Police Department. The reports include data on all reported traffic accidents and crimes. Some caution must be exercised when interpreting these data. The numbers reflect reported incidents only. As under-reporting is certain to occur these data present an underestimate of actual prevalence.

The act of reporting a crime is itself a poorly understood phenomenon, subject to changes over time. Thus comparison of annual statistics must be done cautiously. The reporting patterns and coverage rates vary between different crimes. For example, one would expect less under-reporting to be associated with homicide than with rape. Thus care must be taken when comparing prevalence of different crimes.

AIR QUALITY

Environment Canada maintains air quality monitoring stations throughout Canada including six stations within Metropolitan Toronto. Using the data collected at these stations Environment Canada has prepared an Annual Air Quality Index for major cities for the twelve year period between 1974 and 1985. The data is subject to any variation introduced by location of monitoring stations, testing techniques, and sampling schedules.

REPRODUCTION

Data on live births and stillbirths are extracted from every notice of live birth or stillbirth of a child born to a Toronto resident. Information collected includes child's date of birth, age of mother, marital status of mother, birth weight and gestational age of child, parity, mother's country of birth and address. Although occasionally variables may be missing or inaccurate, birth data are considered to be fairly reliable and complete. All addresses are checked to ensure accurate coding of census tract.

Abortion data are supplied to the Department of Public Health by the Ministry of Health for the City of Toronto as a whole. These data consist of tabulations reported to the Ministry by Ontario hospitals. They include only those abortions performed in hospitals and do not include abortions performed in clinics or outside the province. In addition, it is recognized that approximately 10 to 15 percent of abortions assigned to the City of Toronto actually represent abortions for residents of other areas of Metropolitan Toronto.

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

During 1983 AIDS became a reportable disease. The Department of Public Health receives reports of AIDS cases from private physicians and hospitals. Recent information has indicated that AIDS may be under-reported in the City during the period covered by this report by as much as twenty percent.

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

All cases of HIV positivity that are diagnosed by City of Toronto Physicians are reported to the Department of Public Health by the Provincial Laboratory which is the only licensed testing facility. This includes both residents and non-residents. Each case is investigated by the Department and as much information as is available or will be provided is recorded. The investigation will identify if this is a duplicate report for a case previously reported to the Department. Numbers of completed investigations should therefore be for individuals, excluding duplicate reports. In cases where insufficient information is available to uniquely identify the case the investigation is closed and the case will not be counted as a completed investigation. Completed investigations therefore under-count actual numbers of HIV positive individuals. Also, an HIV positive individual may not be tested for some time after acquiring the infection so will remain unreported to the Department. In summary, the number of cases reported to and successfully investigated by the Department is a gross under-estimate. Any interpretation of this data should be done with caution.

OTHER SEXUALLY TRANSMITTED DISEASE

The Department of Public Health registers and collects information on cases of sexually transmitted disease reported in City of Toronto residents and cases in non-residents reported by City of Toronto physicians. The data included in this report refer to cases in City of Toronto residents only. The number of cases reported is considered to be an under-estimate of true disease incidence in the community. However, assuming a fairly uniform under-reporting over the years and among diseases it is still meaningful to look at trends over time and comparisons between diseases in number of notifications.

OTHER COMMUNICABLE DISEASE

Data on all other reportable communicable diseases, including Hepatitis and Tuberculosis, are collected for City of Toronto Residents who are reported to the Department of Public Health. As with sexually transmitted disease, the number of notifications will be an under-estimate of the true disease incidence but is adequate to provide information on trends over time.

HOSPITAL MORBIDITY

The Hospital Medical Records Institute (HMRI) collects and analyzes hospital statistics and these data are made available to the Department of Public Health through the Ontario Ministry of Health. Data on hospital discharges for the fiscal year April 1987 to March 1988 were provided at the individual level for Toronto residents. Data included sex, age, census tract, length of stay and illness (coded using the 9th Revision of the International Classification of Diseases).

It should be noted that these data are episode related; they do not indicate the number of individuals who are hospitalized for a particular illness. If an individual is admitted to hospital several times in one year for the same illness, each hospitalization is counted. Repeat visits are not identified.

The data on hospitalization due to accident or injury was extracted using the External Cause code (E Code). An E Code, in addition to the diagnosis code(s), is provided whenever possible for an illness that was externally inflicted (eg. fractured hip due to fall). There is some limitation in extracting the data in this manner. The HMRI data includes codes for only the first four diagnoses so there may be cases where an E Code was applicable but was not among the first four codes. Such cases would be excluded from our analyses based on E Code. As this has been found to occur in only 3% of cases in the 1987/88 data the error introduced is considered to be within an acceptable range. However, these data should be considered a somewhat conservative estimate of actual incidence.

MORTALITY

Data on mortality are extracted from the death certificate of every Toronto resident who dies within or outside the City. Information collected includes date of death, date of birth, sex, address, occupation, country of birth and cause of death. The underlying cause of death is recorded by Department staff using the 9th Revision of the International Classification of Diseases. Liaison with the Registrar General's Office and the Metropolitan Toronto Coroner's Office enables us to validate cause of death coding and address and in some cases retrieve information missing from the original death certificate. All addresses are checked to ensure accurate coding of census tract.

There are a number of problems with data from death certificates which may affect the analysis of trends in disease over time. They may include incorrect physician recording, selection of a single cause of death when there may have been several and changes in technology which affect diagnosis. There is also often considerable time lapse in verification of cause of death in Coroner's cases. In spite of these difficulties, however, mortality data is considered to be a reliable indicator in studying disease occurrence in a population.

Appendix B
Statistical Tables

Table 2.2 Population Change, City of Toronto

Year	Population
1951	699,151
1961	702,524
1971	712,790
1981	600,221
1986	612,285
1988	617,761

Note: The 1988 figure is based on a projection prepared by the Health Information Section.

Source: Statistics Canada, Census of Canada

Table 2.3

Population by Sex and Age, City of Toronto, 1986

Age Group	Population Male	Female	Total
0-4	16,935	16,020	32,960
5-9	14,110	13,615	27,725
10-14	14,630	13,825	28,455
15-19	18,355	17,930	36,285
20-24	30,605	32,385	62,990
25-29	37,170	37,670	74,835
30-34	31,390	32,100	63,495
34-39	27,195	26,490	53,690
40-44	19,755	19,235	38,985
45-49	15,620	15,535	31,160
50-54	15,230	14,880	30,115
55-59	15,040	14,985	30,025
60-64	13,180	15,125	28,310
65-69	9,325	12,075	21,400
70-74	7,935	11,190	19,130
75-79	5,440	9,645	15,090
80-84	3,220	6,765	9,980
85+	2,005	5,665	7,665
Total	297,135	315,155	612,290

Source: Statistics Canada, 1986 Census of Canada

Table 2.4 Fertility Rates, City of Toronto

Year	Total Fertility Rate (per 1,000 Females)
1979	1385.4
1980	1409.0
1981	1300.2
1982	1358.6
1983	1346.6
1984	1368.7
1985	1386.2
1986	1389.5
1987	1389.9
1988	1399.3

Age-Specific Fertility Rate (per 1,000 Females)

Year	Age Group					
	15-19	20-24	25-29	30-34	35-39	40-45
1979	28.7	65.1	79.6	65.6	31.3	6.8
1980	30.5	62.7	77.0	72.8	33.1	5.7
1981	27.2	56.9	69.2	71.7	29.5	5.5
1982	28.5	58.5	73.4	72.1	34.0	5.3
1983	26.9	53.7	73.2	75.1	35.5	5.0
1984	26.5	53.1	73.3	77.1	37.1	6.6
1985	25.3	51.7	71.6	80.8	41.1	6.7
1986	24.5	52.3	70.2	80.7	42.3	7.9
1987	23.5	48.9	72.3	80.7	43.1	9.5
1988	24.7	49.4	72.2	82.8	42.3	8.6

Table 2.5 Dependency Ratio, City of Toronto

Year	Dependency Ratio Total	Child (under 15)	Aged (65 & over)
1956	45.6	29.8	15.8
1961	53.0	36.0	17.1
1966	53.9	37.0	16.9
1971	47.5	31.3	16.2
1976	44.7	27.7	17.1
1981	43.2	21.8	21.4
1986	36.1	19.8	16.3

Source: Statistics Canada, Census of Canada

Table 2.6 Life Expectancy at Birth, City of Toronto, 1986

Male

Age Interval	Mid Year Population	Observed Expectation of Life (Years)
<1	3,392	72.3
1-5	13,568	72.0
5-9	14,155	68.1
10-14	14,635	63.2
15-19	18,370	58.3
20-24	30,630	53.4
25-29	37,180	48.7
30-34	31,410	43.9
35-39	27,175	39.2
40-44	19,740	34.6
45-49	15,675	30.1
50-54	15,255	25.9
55-59	15,055	21.9
60-64	13,160	18.2
65-69	9,330	15.0
70-74	7,940	12.1
75+	10,660	9.4

Female

Age Interval	Mid Year Population	Observed Expectation of Life (Years)
<1	3,209	79.3
1-5	12,836	78.9
5-9	13,625	75.1
10-14	13,840	70.1
15-19	17,970	65.2
20-24	32,410	60.3
25-29	37,660	55.4
30-34	32,105	50.5
35-39	26,475	45.6
40-44	19,240	40.8
45-59	15,515	36.1
50-54	14,920	31.5
55-59	15,025	27.1
60-64	15,110	22.9
65-69	12,080	18.9
70-74	11,170	15.1
75+	22,080	11.6

Note: The denominator used is the 1986 census population and the death rate is the average annual death rate for the years 1984-1988.

Ref: Chiang, C.C. Introduction to Stochastic Processes in Biostatistics. Wiley, New York, 1968.

Table 2.7 Change in Family Composition, City of Toronto

Location	Husband-Wife Families	%	Lone Parent Families	%	Total Families	%
			1981			
City of Toronto	115,650	85.1	20,325	14.9	135,975	100.0
Rest of Metro	365,055	87.3	53,095	12.7	418,150	100.0
Fringe	316,000	91.6	29,155	8.4	345,155	100.0
Region	796,705	88.6	102,575	11.4	899,280	100.0
			1986			
City of Toronto	115,990	83.4	23,045	16.6	139,035	100.0
Rest of Metro	369,525	85.7	61,770	14.3	431,295	100.0
Fringe	381,870	90.7	39,120	9.3	420,990	100.0
Region	867,385	87.5	123,935	12.5	991,320	100.0
			1981-1986 (%Chg.)			
City of Toronto	340	0.3	2,720	13.4	3.060	2.3
Rest of Metro	4,470	1.2	8,675	16.3	13,145	3.1
Fringe	65,870	20.8	9,965	34.2	75,835	22.0
Region	70,680	8.9	21,360	20.1	92,040	10.2

Source: Research Bulletin 29, Research and Information Section, City of Toronto Planning and Development Department.

Note: A census family consists of a husband and wife (including common-law) living alone or a husband and wife with unmarried children of any age living at home or a lone parent with unmarried children of any age living at home.

Table 4.2.1a Smoking Behaviour of People Aged 15 and Over in Canada, Ontario and Metro Toronto

	(% of Total Population Aged 15 & Over)		
Smoking Behaviour	1981	1983	1986
Never Smoked			
Canada	44.0	45.4	44.4
Ontario	45.4	46.6	47.1
Metro Toronto	48.3	50.3	53.3
Regular Smokers			
Canada	32.7	31.1	28.2
Ontario	30.1	30.2	25.8
Metro Toronto	27.4	27.9	24.8
Former Smokers			
Canada	17.8	18.6	22.9
Ontario	18.3	18.2	22.5
Metro Toronto	18.6	17.2	18.5
Occasional Smokers			
Canada	3.5	3.7	3.0
Ontario	3.7	3.1	2.8
Metro Toronto	3.7	3.1	2.4

Note: Regular smokers are those who reported smoking cigarettes, pipes or cigars daily. Never smoked refers to respondents who indicated they have never smoked cigarettes, pipes and cigars. Former smokers are persons who have smoked in the past but who were not smokers at the time of the survey. Occasional smokers are those who did smoke at the time of the survey, but not daily.

Source: Health and Welfare Canada

Table 4.2.1b % of Population Age 15 & Over Who are Regular Smokers

Year	Canada	Ontario
1970	40.6	37.4
1972	39.8	35.3
1977	35.9	33.5
1979	34.2	31.1
1981	32.7	30.1
1983	31.1	30.2
1986	28.2	25.8

Table 4.2.2 Daily Consumption of Cigarettes among Current Smokers, City of Toronto

Average Daily Consumption of Cigarettes	% of Current Smokers 1983	1988	Change
Less than 1	0	1	-
1-10	31	34	Increase in light smokers
11-25	55	55	No change
Over 25	14	10	Decrease in heavy smokers

Table 6.2a Number of Live Births and Crude Birth Rates, City of Toronto

Year	Total Population	Live Births	Crude Birth Rate
1979	594,709	7,895	13.3
1980	596,904	8,103	13.6
1981	599,300	7,597	12.7
1982	601,933	8,034	13.3
1983	604,566	8,069	13.3
1984	607,199	8,306	13.7
1985	609,832	8,521	14.0
1986	612,465	8,658	14.1
1987	615,112	8,807	14.3
1988	617,761	8,995	14.6

Table 6.2b Number of Live Births and Percent of Total Births by Maternal Age

Maternal Age Group	1988		1983	
	No.	%	No.	%
10-14	2	*	4	*
15-19	409	4.6	541	6.7
20-24	1,615	18.0	1,715	21.3
25-29	2,808	31.3	2,621	32.5
30-34	2,752	30.6	2,281	28.3
35-39	1,221	13.6	811	10.1
40-44	175	1.9	88	1.1
45-49	1	*	1	*
Total	8,983	100.0	8,062	100.0

Note: Age of Mother unspecified for 12 births in 1988 and 7 births in 1983.

Table 6.3a Number of Mothers by Parity by Maternal Age, 1988
City of Toronto

Maternal Age	Parity 1	2	3	4+	Total
<20	346	62	2	1	411
20-24	1,047	457	92	18	1,614
25-29	1,588	836	290	93	2,807
30-34	1,251	1,028	361	110	2,750
35-39	424	454	226	117	1,221
40+	61	57	33	25	176
Total	4,717	2,894	1,004	364	8,979

Table 6.3b Number of Mothers by Parity by Maternal Age, 1983
City of Toronto

Maternal Age	Parity 1	2	3	4+	Total
<20	468	72	5	0	545
20-24	1,106	464	110	35	1,715
25-29	1,425	821	289	86	2,621
30-34	964	826	368	123	2,281
35-39	275	261	179	96	811
40+	22	31	18	18	89
Total	4,260	2,475	969	358	8,062

Table 6.4a Birth Place of Mothers, City of Toronto, 1988

Region	No. of Mothers	% of Total
Ontario	3,214	35.7
Other Canada	856	9.5
United States	192	2.1
United Kingdom	280	3.1
Caribbean	322	3.6
Other Latin America	448	5.0
Portugal	801	8.9
Italy	124	1.4
Other Europe	419	4.7
China	334	3.7
Hong Kong	181	2.0
India	145	1.6
Southeast Asia	508	5.6
Other Southern Asia	161	1.8
Other Asia	142	1.6
Other	868	9.7

Table 6.4b Number of Mothers by Birth Place by Maternal Age, City of Toronto, 1988

Maternal Age	Birth Place		
	Canada	Outside Canada	Total
10-14	2	0	2
15-19	236	173	409
20-24	632	983	1,615
25-29	1,172	1,636	2,808
30-34	1,413	1,339	2,752
35-39	554	667	1,221
40-44	61	114	175
45-49	0	1	1
Missing	0	12	12
Total	4,070	4,925	8,995

Table 6.5 Number of Live Births by Birth Weight, City of Toronto

Year	Birth Weight: Below 1500 gm	1500 - 2499 gm	2500 gm & Over	Total	Low Birth Weight Rate*
1979	108	434	7,353	7,895	6.9
1980	91	418	7,594	8,103	6.3
1981	77	384	7,136	7,597	6.1
1982	81	370	7,583	8,034	5.6
1983	98	392	7,579	8,069	6.1
1984	105	404	7,797	8,306	6.1
1985	94	401	8,026	8,521	6.5
1986	95	456	8,107	8,658	6.4
1987	98	393	8,316	8,807	5.9
1988	99	467	8,429	8,995	6.3

* Percent of live births with birth weight less than 2500 grams.

Table 6.6 Induced Abortions Performed in Hospitals for City of Toronto Residents by Marital Status and Age Group, 1988

MARITAL STATUS

AGE GROUP	Married & Common Law	Single	Divorced & Separated	Widowed	Unknown	Total
10-14	0	11	0	0	0	11
15-19	37	779	3	0	16	835
20-24	329	1,513	55	1	34	1,932
25-29	570	1,058	119	5	28	1,780
30-34	497	464	97	2	18	1,078
35-39	307	203	67	7	12	596
40-44	88	41	20	6	2	157
45+	4	3	1	1	1	10
All Ages	1,832	4,072	362	22	111	6,399

Source: Ontario Ministry of Health

Table 7.2a Sexually Transmitted Disease Counts, City of Toronto Residents

Male

Year	Gonorrhea	PPNG*	Chlamydia	Infectious Syphilis	Latent Syphilis
1979	2,641	-	-	279	239
1980	2,907	-	-	361	252
1981	3,121	-	-	302	207
1982	2,885	1	-	160	159
1983	2,469	7	-	203	221
1984	2,147	10	-	196	261
1985	1,997	26	203	149	224
1986	1,301	51	422	85	223
1987	901	25	526	58	359
1988	761	52	443	32	256

Female

Year	Gonorrhea	PPNG*	Chlamydia	Infectious Syphilis	Latent Syphilis
1979	1,181	-	-	19	112
1980	1,089	-	-	16	103
1981	977	-	-	12	72
1982	974	1	-	9	70
1983	894	2	-	17	92
1984	1,008	12	-	24	160
1985	969	13	370	14	127
1986	781	25	749	26	120
1987	540	16	1,182	11	155
1988	472	22	1,302	13	103

* Penicillinase-producing Neisseria Gonorrhea

Table 7.2b Age and Sex Specific Sexually Transmitted Disease Rate, 1979-88

YEAR	AGE	MALE GONORRHEA	FEMALE GONORRHEA	MALE INFECT SYPHILIS	FEMALE INFECT SYPHILIS	MALE LATENT SYPHILIS	FEMALE LATENT SYPHILIS
1979	0-14	2.0	18.6	0.0	0.0	0.0	0.0
1980	0-14	0.0	12.6	2.0	0.0	0.0	0.0
1981	0-14	0.0	23.4	0.0	0.0	0.0	0.0
1982	0-14	8.2	23.8	0.0	0.0	0.0	0.0
1983	0-14	18.8	17.6	2.1	0.0	0.0	0.0
1984	0-14	6.4	22.3	0.0	0.0	8.5	2.2
1985	0-14	2.2	38.5	0.0	0.0	0.0	0.0
1986	0-14	6.6	23.0	0.0	0.0	0.0	0.0
1987	0-14	2.2	14.0	0.0	0.0	0.0	0.0
1988	0-14	0.0	11.9	0.0	0.0	0.0	0.0
1979	15-19	1013.1	1575.9	34.1	13.1	34.1	8.7
1980	15-19	1081.0	1382.8	52.7	9.0	22.0	9.0
1981	15-19	1067.2	1307.3	31.8	0.0	22.7	4.7
1982	15-19	944.1	1255.4	18.8	4.8	18.8	9.6
1983	15-19	749.0	1085.4	14.6	19.9	14.6	0.0
1984	15-19	1069.1	1651.2	35.3	10.3	20.2	0.0
1985	15-19	1057.6	1676.0	41.9	5.4	20.9	5.4
1986	15-19	876.4	1563.7	5.4	16.7	5.4	5.6
1987	15-19	549.9	1019.4	5.7	0.0	17.0	11.6
1988	15-19	473.1	887.7	11.8	18.1	11.8	12.1
1979	20-24	2513.8	1337.7	146.8	16.0	55.9	35.1
1980	20-24	2803.9	1280.3	183.5	9.5	72.7	25.4
1981	20-24	3126.0	1097.1	195.4	9.5	61.7	28.5
1982	20-24	2905.0	1142.0	71.3	6.3	54.3	15.7
1983	20-24	2258.3	1058.2	97.5	15.7	43.7	12.5
1984	20-24	2243.1	1109.1	63.2	21.9	63.2	6.2
1985	20-24	2069.9	1072.7	69.2	12.4	46.1	21.7
1986	20-24	1292.9	842.3	42.4	30.9	49.0	33.9
1987	20-24	1002.5	583.4	29.1	15.4	80.8	21.5
1988	20-24	743.3	504.2	25.6	3.1	64.1	48.9
1979	25-29	2420.6	661.1	182.4	0.0	106.1	20.9
1980	25-29	2439.5	567.4	308.1	11.8	118.8	35.3
1981	25-29	2423.0	520.1	180.4	5.8	112.0	23.1
1982	25-29	2162.5	530.9	123.7	2.8	75.4	14.2
1983	25-29	1876.4	449.3	128.8	5.6	117.1	39.1
1984	25-29	1470.1	491.2	96.7	16.5	108.1	24.7
1985	25-29	1401.6	477.7	77.4	18.9	105.0	24.3
1986	25-29	922.5	308.0	51.1	8.0	75.3	34.5
1987	25-29	602.3	235.2	36.7	7.8	246.2	39.2
1988	25-29	551.1	257.2	15.3	10.3	119.9	41.2

continued...

continued

Table 7.2b Age and Sex Specific Sexually Transmitted Disease Rate, 1979-88

YEAR	AGE	MALE GONORRHEA	FEMALE GONORRHEA	MALE INFECT SYPHILIS	FEMALE INFECT SYPHILIS	MALE LATENT SYPHILIS	FEMALE LATENT SYPHIL
1979	30+	597.3	94.3	111.6	5.9	118.1	53.3
1980	30+	679.7	99.8	126.0	4.1	120.9	47.0
1981	30+	746.3	87.8	113.4	4.0	93.1	31.0
1982	30+	686.0	81.8	59.0	2.8	71.6	30.1
1983	30+	611.9	94.4	77.7	3.4	102.0	41.6
1984	30+	451.0	77.3	83.2	5.0	119.5	80.6
1985	30+	399.9	63.8	56.2	1.1	102.0	60.5
1986	30+	240.8	54.4	30.9	5.4	106.5	51.2
1987	30+	157.1	41.5	20.4	1.6	140.9	70.6
1988	30+	138.5	29.3	9.5	2.7	111.1	36.8
1979	TOTAL	916.9	385.1	96.9	6.2	83.0	36.5
1980	TOTAL	1005.2	353.9	124.8	5.2	87.1	33.5
1981	TOTAL	1074.5	316.3	104.0	3.9	71.3	23.3
1982	TOTAL	988.7	314.1	54.8	2.9	54.5	22.6
1983	TOTAL	842.2	287.1	69.2	5.5	75.4	29.5
1984	TOTAL	729.0	322.4	66.6	7.7	88.6	51.2
1985	TOTAL	675.0	308.6	50.4	4.5	75.7	40.4
1986	TOTAL	437.8	247.7	28.6	8.3	75.0	38.1
1987	TOTAL	301.8	170.6	19.4	3.5	120.2	49.0
1988	TOTAL	253.8	148.5	10.7	4.1	85.4	32.4

Table 7.3.1 AIDS Cases, Sex and Age by Mortality Status
Cumulative Cases as of December 31, 1988

Sex by Status

	Adult		Pediatric*			
	Male	Female	Male	Female	Total	(%)
Alive	182	1	1	0	184	(35.7)
Dead	330	1	0	0	331	(64.3)
Total	512	2	1	0	515	

*Pediatric cases are ages 0-14

Age by Status

		Alive	Dead	Total
Pediatric	0-4	1	0	1
	5-9	0	0	0
	10-14	0	0	0
Adult	15-19	0	0	0
	20-24	11	12	23
	25-29	19	32	51
	30-34	51	69	120
	35-39	47	83	130
	40-44	28	61	89
	45-49	13	41	54
	50-54	7	17	24
	55-59	5	7	12
	60-64	2	4	6
	65-69	0	3	3
	70-74	0	2	2
	75+	0	0	0
	Total	184	331	515

Table 7.3.2a HIV Antibody Positives, Completed Investigations by Age and Sex, Cumulative Cases as of December 31, 1988

		Male	Female	Total
Pediatric	0-4	7	5	12
	5-9	15	1	16
	10-14	12	1	13
Adult	15-19	42	3	45
	20-24	270	11	281
	25-29	519	25	544
	30-34	541	8	549
	35-39	474	5	479
	40-44	306	2	308
	45-49	140	0	140
	50-54	76	3	79
	55-59	42	2	44
	60-64	18	0	18
	65-69	9	1	10
	70-74	4	2	6
	75+	0	0	0
	Missing	27	1	28
	Total	2,502	70	2,572

Table 7.3.2b

HIV Antibody Positives, Completed Investigations by Risk Factors, Cumulative Cases as of December 31, 1988

Adult Risk Factors (Age 15 and over)

Note: One person may have more than one risk factor

Homosexual or bisexual practices	2,299
Injection Drug Use	135
Recipient of blood or blood products	128
Sexual partner of a high risk person	68
No identified risk factor	46

Pediatric Risk Factors (Age 0-14)

Perinatal transmission	10
Recipient of blood or blood products	31

Comments: Of the 2,572 HIV antibody positives, 2,299 (89% of the total) were males who identified themselves as being either homosexual or bisexual.

Table 7.4 Number of Hepatitis Cases, City of Toronto Residents

Year	Number of Cases			
	Hepatitis A	Hepatitis B	Non-A, Non-B Hepatitis	Total
1983	15	145	4	164
1984	22	107	5	134
1985	36	128	2	166
1986	30	117	3	150
1987	68	79	4	151
1988	68	92	10	170

Table 7.5

Number of Tuberculosis Cases, City of Toronto Residents

Year	Number of Cases			
	New	Reactive	Unknown	Total
1982	149	22	3	174
1983	139	23	10	172
1984	169	26	5	200
1985	138	21	4	163
1986	135	26	6	167
1987	150	34	5	189
1988	131	33	5	169

Table 7.7a

Top Five Hospital Discharge Diagnoses by Age and Sex, 1979-88*+

Male

0-14	15-54	55+
Perinatal (1,823)	Injury and and Poisoning (1,938)	Circulatory (3,078)
Respiratory (1,182)	Digestive (1,918)	Neoplasms (2,107)
Injury and Poisoning (418)	Mental Illness (1,395)	Digestive (1,738)
Congenital (317)	Respiratory (1,064)	Genito-urinary (1,367)
Digestive (285)	Circulatory (991)	Respiratory (1,163)

Female

0-14	15-54	55+
Perinatal (1,594)	Childbirth (11,795)	Circulatory (2,913)
Respiratory (829)	Genito-urinary (2,855)	Neoplasms (1,940)
Congenital (262)	Mental Illness (1,519)	Digestive (1,585)
Injury and Poisoning (242)	Digestive (1,483)	Injury and Poisoning (1,379)
Ill-defined (182)	Neoplasms (1,467)	Central Nervous System (1,319)

* Source: Ontario Ministry of Health
\+ Number of discharges in parentheses

Table 7.7b Number of Hospital Discharges by Sex, Age and by ICS-Chapters
City of Toronto Residents, 1987-1988*

Male

ICD Chapter	Unknow	Age Group 0-14	15-54	55+	Total
Unclassified	0	2,445	428	588	3,461
Infectious & Parasitic Diseases	0	176	557	151	884
Neoplasms	1	25	591	2,107	2,724
Endocrine, Nutritional & Metabolic Diseases & Immunity Disorders	0	22	234	269	525
Blood and Blood-forming Organs	0	29	57	112	198
Mental Disorders	2	14	1,395	326	1,737
Nervous System and Sense Organs	0	158	462	764	1,384
Circulatory System	3	20	991	3,078	4,092
Respiratory System	0	1,182	1,064	1,163	3,409
Digestive System	0	285	1,918	1,738	3,941
Genitourinary System	1	156	623	1,367	2,147
Pregnancy & Childbirth	0	0	1	0	1
Skin and Subcutaneous Tissue	1	58	384	184	627
Musculoskeletal System & Connective Tissue	0	54	824	513	1,391
Congenital Anomalies	0	317	87	10	413
Conditions Originating in the Perinatal Period	0	1,823	1	0	1,824
Symptoms Signs & Ill Defined Conditions	0	227	587	640	1,454
Injury & Poisoning	1	418	1,938	773	3,130
TOTAL	9	7,409	12,142	13,783	33,343

* Fiscal year, April 1987-March 1988
Source: Ontario Ministry of Health

Table 7.7b Number of Hospital Discharges by Sex, Age and by ICD-Chapters
City of Toronto Residents, 1987-1988*

Female

ICD Chpater	Unknown	Age Group 0-14	15-54	55+	Total
Unclassified	3	2,479	823	1,070	4,375
Infectious & Parasitic Diseases	0	123	209	154	486
Neoplasms	2	32	1,467	1,940	3,441
Endocrine, Nutritional & Metabolic Diseases & Immunity Disorders	1	43	354	395	793
Blood and Blood-forming Organs	0	35	76	139	250
Mental Disorders	1	10	1,519	555	2,085
Nervous System and Sense Organs	0	129	408	1,319	1,856
Circulatory System	2	31	602	2,913	3,548
Respiratory System	0	829	934	986	2,749
Digestive System	2	141	1,483	1,585	3,211
Genitourinary System	0	60	2,855	876	3,791
Pregnancy & Childbirth	0	7	11,795	2	11,804
Skin and Subcutaneous Tissue	0	40	277	204	521
Musculoskeletal System & Connective Tissue	1	53	782	962	1,798
Congenital Anomalies	0	262	100	21	383
Conditions Originating in the Perinatal Period	0	1,594	0	2	1,596
Symptoms Signs & Ill Defined Conditions	0	182	794	734	1,710
Injury & Poisoning	4	242	915	1,379	2,540
TOTAL	16	6,292	25,393	15,236	46,937

* Fiscal year, April 1987-March 1988
Source: Ontario Ministry of Health

Table 8.2 Annual Stillbirth Ratios, City of Toronto

Year	Number of Stillbirths	Number of Live Births	Annual Stillbirth Ratio
1979	67	7,895	8.5
1980	51	8,103	6.3
1981	51	7,597	6.7
1982	68	8,034	8.5
1983	77	8,069	9.5
1984	70	8,306	8.4
1985	61	8,521	7.2
1986	66	8,658	7.6
1987	52	8,807	5.9
1988	73	8,995	8.1

Table 8.3 Infant Mortality Rates, City of Toronto

Year	Neonatal Mortality		Infant Mortality	
	No.	Rate	No.	Rate
1979	71	8.0	95	12.0
1980	52	6.4	87	10.7
1981	46	6.1	75	9.9
1982	41	5.1	57	7.1
1983	41	5.1	68	8.4
1984	47	5.7	77	9.3
1985	36	4.2	50	5.9
1986	52	6.0	68	7.9
1987	32	3.5	56	6.4
1988	39	4.4	59	6.6

Table 8.4a Perinatal Mortality Rates, City of Toronto

Year	No. of late Fetal Deaths	No. of Early Neonatal Deaths	No. of Perinatal Deaths	Perinatal Mortality Rate
1979	52	56	108	13.6
1980	33	43	76	9.3
1981	41	38	79	10.3
1982	45	34	79	9.8
1983	50	34	84	10.3
1984	47	42	89	10.7
1985	34	30	64	7.5
1986	41	40	81	9.3
1987	27	25	52	5.9
1988	40	32	72	8.0

Table 8.4b Comparison of Infant Mortality Rate, Neonatal Mortality Rate and Perinatal Mortality Rate of Canadian Cities, 1986

City	Population	IMR	Neo-natal MR	Perinatal MR
Metro Toronto	2,192,721	7.63	5.49	10.10
East York	101,085	8.41	5.61	9.81
Etobicoke	302,973	6.46	4.39	8.79
North York	556,297	6.10	4.88	10.30
Scarborough	484,676	7.61	5.30	8.97
Toronto	612,289	9.03	6.97	11.42
York	135,401	8.96	3.98	10.46
St. John's	96,216	8.49	3.54	8.49
Halifax	113,577	8.38	4.19	8.38
Montreal Island	1,752,582	7.63	5.61	8.57
Ottawa	300,763	10.81	8.65	10.54
Winnipeg	594,551	9.08	6.39	8.19
Regina	175,064	11.65	5.98	8.50
Saskatoon	177,641	5.96	4.47	7.75
Calgary	636,104	7.71	4.11	7.71
Edmonton	573,982	10.61	5.82	8.03
Vancouver	431,147	9.91	7.16	9.72

Source: Statistics Canada, Principal Vital Statistics by Local Areas, 1986. Cat. No. 84-542

Table 8.5

Directly Standardized Mortality Rates, City of Toronto

Year	All Deaths	Neoplasms	Circulatory	External Causes
1979	870.4	206.5	391.9	74.9
1980	856.0	197.6	383.1	70.8
1981	841.5	208.7	358.0	65.2
1982	824.9	204.3	350.9	61.1
1983	820.8	203.3	347.6	62.1
1984	821.6	201.0	331.4	60.9
1985	826.2	215.1	314.6	55.5
1986	830.2	220.2	311.0	54.2
1987	833.5	217.9	306.5	55.3
1988	849.5	221.1	309.4	54.2

Directly Standardized Mortality Rates, City of Toronto

Year	All Deaths	Respiratory	Digestive
1979	870.4	60.2	40.8
1980	856.0	60.8	41.0
1981	841.5	62.7	42.2
1982	824.9	54.9	38.7
1983	820.8	61.0	33.0
1984	821.6	67.2	36.0
1985	826.2	68.7	37.7
1986	830.2	65.3	39.9
1987	833.5	68.2	36.5
1988	849.5	71.4	36.3

Table 8.6a

Major Causes of Death by Sex, City of Toronto, 1988

Male

Rank	Disease	No. of Deaths	% of Total Deaths
1	Myocardial Infarction	318	11.5
2	Ischaemic Heart Disease	216	7.8
3	Cancer of Trachea, Lung	214	7.8
4	Ill Defined Conditions	135	4.9
5	Other Viral Diseases (includes AIDS)	129	4.7
6	Pneumonia	105	3.8
	All Other Causes	1,638	59.5
	Total	2,755	100.0

Female

Rank	Disease	No. of Deaths	% of Total Deaths
1	Ischaemic Heart Disease	278	11.2
2	Myocardial Infarction	247	9.9
3	Acute Cerebrovascular Disease	145	5.8
4	Cancer of Trachea, Lung	127	5.1
5	Ill Defined Conditions	120	4.8
6	Pneumonia	106	4.3
	All Other Causes	1,468	58.9
	Total	2,491	100.0

Table 8.6b Top 20 Causes of Death, City of Toronto, 1988

Cause	Male	Female	Total
Myocardial infarction & ischaemic heart disease	579	525	1,104
Cancer, trachea & lung	214	127	341
Acute cerebrovascular disease	89	145	234
Chronic obstructive lung disease	133	95	228
Pneumonia & influenza	106	107	213
Pulmonary heart disease	86	104	190
Cancer, digestive organs excl. colon & rectum	103	58	161
Digestive disease excl. chronic liver disease & cirrhosis	71	79	150
Cancer, unspecified sites	73	76	149
Cancer, colon & rectum	71	76	147
Accidents, excl. motor vehicle	89	73	162
Central nervous system diseases	70	67	137
Cancer, genitourinary organs excl. uterus & cervix	80	55	135
AIDS	126	0	126
Cancer, female breast	0	119	119
Cardiac dysrhythmias	50	61	111
Suicide	73	25	98
Falls	36	42	78
Diabetes mellitis	37	39	76
Chronic liver disease & cirrhosis	54	21	75

Table 8.6c Leading Causes of Death for Selected Age Groups, 1988

Cause of Death	Number of Deaths	% of Total Deaths in this Age Group
<1 Year		
Respiratory diseases of infancy	14	23.7
Congenital anomalies excluding heart and circulatory	10	16.9
Congenital heart and circulatory disease	9	15.3
Sudden death, cause unknown	8	13.6
Other perinatal conditions	5	8.5
Fetus with complications	3	5.1
Abnormal growth	3	5.1
Central nervous system diseases	3	5.1
Digestive system disorders	2	3.4
Birth trauma	1	1.7
Metabolic disorders	1	1.7
Total	**59**	
1-4 Years		
Congenital anomalies	3	17.6
Cancer, other and unspecified sites	3	17.6
Motor vehicle traffic accidents	2	11.8
Cancer, endocrine glands	2	11.8
Motor vehicle non-traffic accidents	1	5.9
Homicide	1	5.9
Cancer, eye	1	5.9
Central nervous system diseases	1	5.9
Diseases of the blood	1	5.9
Metabolic disorders	1	5.9
Circulatory system diseases	1	5.9
Total	**17**	
5-14 Years		
Motor vehicle traffic accidents	3	20.0
Burns	2	13.3
Drowning	2	13.3
Leukaemia	2	13.3
Cancer, bone	1	6.7
Cancer, brain	1	6.7
Cancer, endocrine glands	1	6.7
Cancer, soft tissue	1	6.7
Heart disease, unspecified	1	6.7
Congenital heart disease	1	6.7
Total	**15**	

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Table 8.6c Leading Causes of Death for Selected Age Groups, 1988

Cause of Death	Number of Deaths	% of Total Deaths in this Age Group
---------- 15-24 Years ----------		
Suicide	14	24.1
Motor vehicle traffic accidents	8	13.8
Other accidents	5	8.6
AIDS	4	6.9
Homicide	4	6.9
Central nervous system diseases	3	5.2
Accidental drug poisoning	3	5.2
Congenital anomalies	2	3.4
Cancer, Hodgkins disease	2	3.4
Myocardial infarction & ischaemic heart disease	1	1.7
Other and unknown	12	20.7
Total	**58**	
---------- 25-34 Years ----------		
AIDS	33	21.7
Suicide	21	13.8
Motor vehicle traffic accidents	14	9.2
Other accidents	12	7.9
Accidental drug poisoning	9	5.9
Homicide	7	4.6
Central nervous system diseases	4	2.6
Respiratory diseases excluding pneumonia & influenza	3	2.0
Digestive diseases excluding chronic liver disease & cirrhosis	3	2.0
Cancer, oral cavity	2	1.3
Other and unknown	44	28.9
Total	**152**	

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Table 8.6c Leading Causes of Death for Selected Age Groups, 1988

Cause of Death	Number of Deaths	% of Total Deaths in this Age Group
35-44 Years		
AIDS	57	27.4
Suicide	23	11.1
Myocardial infarction & ischaemic heart disease	12	5.8
Chronic liver disease & cirrhosis	9	4.3
Motor vehicle traffic accidents	9	4.3
Cancer, other & unspecified sites	8	3.8
Cancer, digestive organs excluding colon & rectum	7	3.4
Cancer, female breast	7	3.4
Cancer, trachea & lung	6	2.9
Homicide	6	2.9
Other and unknown	64	30.8
Total	**208**	
45-54 Years		
Myocardial infarction & ischaemic heart disease	43	15.9
Cancer, trachea & lung	29	10.7
AIDS	25	9.2
Cancer, female breast	14	5.2
Suicide	13	4.8
Cancer, other & unspecified sites	9	3.3
Respiratory diseases excluding pneumonia & influenza	9	3.3
Cancer, digestive organs excluding colon & rectum	8	3.0
Digestive diseases excluding chronic liver disease & cirrhosis	8	3.0
Cancer, colon & rectum	7	2.6
Other and unknown	106	39.1
Total	**271**	

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Table 8.6c Leading Causes of Death for Selected Age Groups, 1988

Cause of Death	Number of Deaths	% of Total Deaths in this Age Group
55-64 Years		
Myocardial infarction & ischaemic heart disease	147	20.4
Cancer, trachea & lung	90	12.5
Cancer, digestive organs excluding colon & rectum	37	5.1
Cancer, female breast	27	3.7
Chronic liver disease & cirrhosis	27	3.7
Cancer, other & unspecified sites	24	3.3
Respiratory diseases excluding pneumonia & influenza	24	3.3
Pulmonary heart disease	20	2.8
Cancer, colon & rectum	19	2.6
Acute cerebrovascular disease	17	2.4
Other and unknown	290	40.2
Total	**722**	
65-74 Years		
Myocardial infarction & ischaemic heart disease	252	23.0
Cancer, trachea & lung	128	11.7
Cancer, digestive organs excluding colon & rectum	53	4.8
Respiratory disease, excluding pneumonia & influenza	48	4.4
Cancer, other & unspecified sites	46	4.2
Cancer, colon & rectum	43	3.9
Pulmonary heart disease	41	3.7
Acute cerebrovascular disease	37	3.4
Cancer, genitourinary organs excluding uterus & cervix	34	3.1
Cancer, female breast	33	3.0
Other and unknown	382	34.8
Total	**1097**	

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Table 8.6c Leading Causes of Death for Selected Age Groups, 1988

Cause of Death	Number of Deaths	% of Total Deaths in this Age Group
---------- 75-84 Years ----------		
Myocardial infarction & ischaemic heart disease	346	23.7
Acute cerebrovascular disease	87	6.0
Respiratory diseases excluding pneumonia & influenza	87	6.0
Cancer, trachea & lung	68	4.7
Pneumonia & influenza	60	4.1
Pulmonary heart disease	57	3.9
Cancer, genitourinary organs excluding uterus & cervix	54	3.7
Digestive diseases excluding chronic liver disease & cirrhosis	53	3.6
Cancer, colon & rectum	50	3.4
Cardiac dysrhythmias	46	3.1
Other and unknown	554	37.9
Total	**1462**	
---------- 85+ Years ----------		
Myocardial infarction & ischaemic heart disease	303	25.8
Pneumonia & influenza	103	8.8
Acute cerebrovascular disease	91	7.7
Pulmonary heart disease	63	5.4
Respiratory diseases excluding pneumonia & influenza	55	4.7
Digestive diseases excluding chronic liver disease & cirrhosis	45	3.8
Falls	39	3.3
Psychoses	38	3.2
Central nervous system diseases	34	2.9
Atherosclerosis	32	2.7
Other and unknown	373	31.7
Total	**1176**	

Table 8.6d Number of Deaths and Percent of Total Deaths by Selected Causes, City of Toronto, 1979-88

Year	Neoplasms		Circulatory		Suicides		AIDS		Total
	No.	%	No.	%	No.	%	No.	%	No.
1979	1254	24%	2355	45%	120	2.3%	0		5229
1980	1205	23%	2303	45%	120	2.3%	0		5158
1981	1271	25%	2159	43%	109	2.1%	0		5083
1982	1247	25%	2128	43%	129	2.4%	0		4992
1983	1244	25%	2108	42%	124	2.5%	0		4981
1984	1227	25%	2012	40%	122	2.4%	0		4993
1985	1315	26%	1919	38%	104	2.1%	0		5042
1986	1348	27%	1904	37%	105	2.1%	51	1.0%	5083
1987	1336	26%	1883	37%	98	1.9%	89	1.7%	5121
1988	1355	26%	1908	36%	98	1.9%	126	2.4%	5246

Table 8.8a Potential Years of Life Lost for Major Causes of Death, City of Toronto, 1988

Male

Cause	PYLL
Myocardial Infarction	1,457
Ischaemic Heart Disease	909
Cancer of Trachea, Lung	1,330
Ill Defined Conditions	1,011
Other Viral Diseases (includes AIDS)	3,835
Pneumonia	229

Female

Cause	PYLL
Ischaemic Heart Disease	230
Myocardial Infarction	366
Acute Cerebrovascular Disease	67
Cancer of Trachea, Lung	568
Ill Defined Conditions	520
Pneumonia	172

Table 8.8b Top 20 Causes of Potential Years of Life Lost, City of Toronto, 1988

Cause	Male	Female	Total
AIDS	3,797	0	3,797
Myocardial infarction & ischaemic heart disease	2,366	596	2,962
Suicide	2,125	635	2,760
Accidents, excl. motor vehicle	1,760	469	2,229
Cancer, trachea & lung	1,330	568	1,898
Motor vehicle accidents	1,330	421	1,751
Cancer, unspecified sites	683	530	1,213
Cancer, female breast	0	9(	907
Cancer, digestive organs excl. colon & rectum	674	211	885
Central nervous system diseases	323	481	804
Chronic liver disease & cirrhosis	631	156	787
Homicide	409	358	767
Chronic obstructive lung disease	472	172	644
Accidental drug poisoning	480	126	606
Digestive diseases excl. chronic liver diease & cirrhosis	342	216	558
Pulmonary heart disease	363	180	543
Cancer, colon & rectum	249	267	516
Congenital anomalies	226	272	498
Pneumonia & influenza	243	172	415
Cancer, bone/tissue excl. female breast	199	212	411

Note: PYLL is calculated based on a life expectancy of 70 years

Table 8.9

Smoking-Related Cancer Deaths by Sex, City of Toronto, 1986

Male

Type	% of All Cancer Deaths
Lung	31.4
Pancreas	6.4
Larynx/Oral	4.9
Esophageal	3.9
Kidney	2.5
Smoking-Related	49.1
All Other types	50.9
All Cancer Deaths	100.0

Female

Type	% of All Cancer Deaths
Lung	17.4
Pancreas	5.5
Larynx/Oral	2.0
Cervical	2.0
Kidney	1.2
Esophageal	0.9
Smoking related	29.0
All Other Types	71.0
All Cancer Deaths	100.0

Source: Health Division, Statistics Canada, 1989

Table 8.10 Indirectly Standarized Mortality Ratios, City of Toronto, 1986

Male: All Causes

	Ontario		Toronto	
Age Group	Deaths	Population	Population	Expected Deaths
0-4	1,195	323.3	16,960	62.7
5-9	77	311.4	14,155	3.5
10-14	76	323.5	14,635	3.4
15-19	298	352.7	18,370	15.5
20-24	422	408.6	30,630	31.6
25-29	428	406.5	37,180	39.1
30-34	440	372.3	31,410	37.1
35-39	547	362.1	27,175	41.1
40-44	625	292.4	19,740	42.2
45-49	880	244.6	15,675	56.4
50-54	1,546	231.3	14,920	99.7
55-59	2,486	226.1	15,255	167.7
60-64	3,668	202.0	13,160	239.0
65-69	4,326	151.8	9,330	265.9
70-74	5,086	118.1	7,940	341.9
75+	14,451	140.9	10,660	1,093.3
	36,551	4467.6	total expected deaths =	2,540.2
			observed deaths =	2,678
			SMR =	1.05

Female: All Causes

	Ontario		Toronto	
Age Group	Deaths	Population	Population	Expected Deaths
0-4	944	308.1	16,045	49.2
5-9	44	296.8	13,625	2.0
10-14	42	306.8	13,340	1.9
15-19	118	336.4	17,970	6.3
20-24	151	406.0	32,410	12.1
25-29	160	414.6	37,660	14.5
30-34	204	389.6	32,105	16.8
35-39	275	370.2	26,475	19.7
40-44	372	292.3	19,240	24.5
45-49	582	244.0	15,515	37.0
50-54	899	230.1	14,920	58.3
55-59	1,279	229.7	15,025	83.7
60-64	2,070	227.9	15,110	137.2
65-69	2,679	181.9	12,080	177.9
70-74	3,657	150.8	11,170	270.9
75+	18,803	249.1	22,080	1,666.7
	32,279	4634.3	total expected deaths =	2,578.6
			observed deaths =	2,405
			SMR =	0.93